Library
of the
Academy of Medicine,
Toronto.

Presented by

Dr. N. A. Powell.

THE

Powell

MEDICAL AND SURGICAL REPORTER:

A WEEKLY JOURNAL.

(ESTABLISHED IN 1858, BY S. W. BUTLER, M.D.)

EDITED BY

D. G. BRINTON, M.D.

JANUARY—JULY 1882.

VOL. XLVI.

LIBRARY
DEC 19 2001
UNIVERSITY OF TORONTO

PHILADELPHIA:
No. 115 SOUTH SEVENTH STREET.
1882.

4543

CONTRIBUTORS.

AGNEW, D. HAYES, Clinic, 8.
ARCHAMBAULT, M., 337.
ASHHURST, JOHN, Jr., Clinic, 119.

BAMBER, T. R., 502.
BARDWELL, E. O., 399.
BATTEN, JOHN M , 27, 137.
BEAN, Dr., 624.
BEGGS, G. W., 502.
BLACHEZ, M., 393.
BLACKWOOD, W. R. D., 200.
BROWN, H. W., 278.
BUCHANAN, JAS. G., 362, 419.
BUNTING, ROSS R., 222.
BURCHMORE, JOHN M., 661.
BURR, H. N., 51
BYRD, WILLIAM A., 204, 537.

CALDWELL, S. W., 222.
CHASE, S. L., 391.
CHASE, S. B., 418.
CONNELL, G. W , 111.
CORSON, HIRAM, 365.
CRANDALL, CHARLES R., 512
CURTIS, ROMAINE J., 85.

DALY, W. H., 346.
DE ARMOND, J. A., 584.
DELAFIELD, FRANCIS, 314, 651.
DREYFUS, BRISAC M., 505.
DUHRING, L. A., Clinic, 262.
DUPLAY, M., 253.

ELFERS, JOHN, 229.
ENGEL, HUGO, 27, 145.

FARNHAM, A. E., 585.
FLINT, AUSTIN, 57, 595.
FREUND H. H., 371.
FULLER, C., 443.

GARRETSON, Prof., Clinic, 35.
GAY, NORMAN, 223.
GLASGOW, R B , 648.
GOODELL, WM., Clinic, 234.

HALE, JAS. L., 644.
HALL, L. B., 566.
HAMILTON, S. M., 165.
HAMILTON, GEO., 285.
HAPPEL, T J. 645, 673.
HARDY, M., 589.
HARRIS, T. M., 27, 484.
HATHCOCK, A. M., 54.
HAZZARD, T. L., Report, 65.
HELM, E. C., 584, 585.
HENGST, D A., 111, 538.
HENRY, FREDERICK, P., 54.
HICKMAN, J. W., 82.
HORNER, FRED., 343.
HUDSON, A. S., 137, 418.
HUDDLESON, JOHN T., 288, 474.
HUTCHINSON, JAS. H , Clinic, 171, 653

JENKINS, GEO. T., 372.

KENNEDY, N. B., 232.
KERLIN, ISAAC N., 533, 561.

LANDESBERG, M., 115.
LAUTENBACH, L. J., Report, 8, 92.
LEVER, J. D. F., 418.
LEVIS, R. J., Clinic, 205.
LITTLE, WM. T., 634.
LYNDON, E. S., 278.

MANLEY, THOS. H., 172.
MANNING. L. S., 421.
MARTIN, W. L., 539.
McCOY, ALEX. W., 313.
M'LANE, JAS. W., 225.
MICHENER, E., 139.
MILLIKIN, J. L., 395.
MITCHELL, CHAS. L., 169.
MONTGOMERY, E. E., 453.
MORRISON, JOSEPH B., 55.
MORRISON, W. H., Report, 67, 119, 625.
MURDOCH, J. B., 431.

NIGHTINGALE, H. B , 363.
NUDING, W. H., 685.

OPPELT, E. A., 252, 584.
OTIS, FESSENDEN N., 113, 141.

PEPPER, WM., Clinic., 625, 671.
PETERS, SAMUEL, 449.
PICKARD, GEO. H., 31.
POLLOCK, C., 616.
PORTERFIELD, FRANK, 26.
POTSDAMER, JOS. B., 424.
PRAEGER, H., 430.
PRINCE, D., 661.
PURYEAR, R. R., 397.

QUIRE, C. E., 443.

RAYMOND, M., 281.
READ, N. S., 398.
REID, J. J., 111.
RIHL, H W., 368.
ROBERTS, JOHN B., 165, 622.

SCHIEDT, PH. M., 507.
SHOLL, EDWARD H., 278, 340.
SHIMONER, A., 540.
SKENE, Prof. A. J. C., 592.
SMITH, T. CURTIS, 477, 617.
SOZINSKEY, THOS. S., 256, 309, 684.
SOUWERS, GEO. F., 9, 78, 107, 426.
STRAWBRIDGE, J. D., 260.
SUTTON, R. S., 472.

TAYLOR, FRED. A., Report, 37, 262.
THOMSON, W., Clinic, 151.
TUCKERMAN, L. B., 53.
TURNBULL, C. S , 331, 387, 46 .

VANCE, REUBEN A , 344.
VARIAN WILLIAM, 201.
VOGEL, F. W., 685.

WARREN, C. E., 52.
WAUGH, WM. F., 7.
WHITE, JOHN M., 54.
WIGHT, J. S , 33, 61, 89.
WILLIS, H. F., 190.
WORRALL, THEO. A., 52, 55.

YARROW, H. C., 64.

INDEX.

Abortion, self, 41.
Abdomen; gunshot wound of the, 188; pigmented mole of, 408.
Abdominal cavity, abscess of, 229.
Abnormality in production of hair, 404.
Abscess; treatment of, 13; temperature in acute, 47; of the liver, 65; of the abdominal cavity, 229; of the pancreas, 244; opened antiseptically, 573.
Absence, congenital, of anus and rectum, 237.
Acetate of lead, peritonitis from injection of, 189.
Acid; *carbolic;* as an external application to piles, 27; hypodermic injections of, 232; *chlorhydric*, 220; *salicylic*, 607; *sulphurous*, in diphtheria, 19.
Accidents from pilocarpine in croup, 27.
Aconite; and digitalis, 606; poisoning by, 77, 386; action of, 500.
Action, of aconite 500; of chloroform, 576.
Activities, systemic or local, can two coexist? 684.
Acupuncture in nervous and spasmodic affections, 186.
Acute; abscess, temperature in, 47; articular rheumatism, 132, 628; farcy in man, 384; phthisis, papilloma of the right vocal cord followed by, 424; pneumonia, urine of, 466; miliary tuberculosis, 512; traumatic malignancy, 574; endo-pericarditis, 628.
Addison's disease, 99, 265.
Adenoma of scalp, 160.
Adherent placenta, death from septicæmia, 251.
Adulterated; opium, 188; foods, commissions to examine, 271.
Adulterations, 304, 360, 415, 500.
Africa, South, as a field for practice, 279.
African; treatment of insanity, 580; race, medical education of, 643.
After treatment of lithotrity, 377.
Affection, a rare, 610.
Age of bacilli, the, 682.
Aid association, medical, 343.
Air in hospitals, purification of, 224.
Akido-galvano-cautery for epilation, 105.
Albuminate of mercury in syphilis, 632.
Albuminuria; in pregnancy, 165, 395; factors of, 490.
Alcohol; in diphtheria, 50, 104, 277, 360; in therapeutics, 128; influence of, on diseased conditions, 242.
Alcoholic intoxication, 107.
Alcoholism, juvenile, 95.
Alkaloids derived from protein compounds, 295.
Alkapton in urine, 238.
Alumni; society of University of Penna., 336; association of Jefferson Medical College, 391.
Alveolar osteo-periostitis in diabetes, 301.
Ambulance service in London, 224.
America of the future, 307.
American; diplomas in Australia, 195; illiteracy, from an English source, 252; butter in Ireland, 363; and British Physicians in Paris, 447; work translated into Italian, 476; surgical association, 634; medical association, 661.
Ammonia; muriate of, as an anthelmintic, 20; and peptones in syphilis, 239; poisoning, 466.
Amputation. quadruple, 77.
Amygdalotomy and suicide, 124.
Anacardium poisoning, 362.
Anæmia, miner's, 413.
Anæsthesia, 331; laryngeal, 609.
Anæsthetic, nitrous oxide as an, in labor, 160.
Anæsthetics; reducing fractures without, 137; the working zone of, 185.
Anatomy, physiology, and pathology of the blood corpuscles, 467.
Aneurism; curious case of, 133; of aorta, 624; of the external iliac, 652; of the deep palmar arch, 678.
Ankle joint, diseases of the, 582.
Annual meeting of the Sanitary Council of the Mississippi Valley, 559.
Antagonism of typhoid and intermittent fevers, 27.
Anti-vaccinationists, 139.
Antiseptic; treatment of abscess, 13; properties of essence of wintergreen, 133; ligature of arterial trunks, 604.
Anuria, 43.
Anus; imperforate, 43; and rectum, congenital absence of, 237; artificial, 242.
Aorta, aneurism of, 624.
Apparatus for garroting physicians, 83.
Aphthous stomatitis, local treatment of, 302.
Arsenic, cure of lichen ruber without, 660.
Arsenical; treatment of chorea, 608; poisoning from sardines, 609.
Arterial elasticity, 360; trunks, ligature of, 604.
Arthritis, 677.
Articles of food, testing for lead in, 188.
Articular rheumatism, 132.
Artificial anus, 242.
Ascites, paracentesis in, 627.
Asphyxia in phthisis, death from, 351.
Aspiration; of the bowels in peritonitis, 13; in intestinal invagination, 272.
Assassination, attempted, of Dr. Gray, 336.
Assistant editor, 112.
Asthma; hay, 69; cardiac treatment of, 274.
Asylum, infant, a model, 631.
Asystolism, 281.
Ataxy; locomotor, following small-pox, 190; and sewing machines, 414.
Attempted assassination of Dr. Gray, 336.
Atrophy of the skin, 39.
Atropia, 617.
Atropine, ptyalism in insanity treated by 188.
Australia, American diplomas in, 195.

Bacili, the age of, 682.
Backward a step, 307.
Bacteria as a cause of leprosy, 133.

Bandage, Martin's, 537.
Baron Larry, 194.
Bean calabar, 107.
Bedbug in the ear, 132.
Benign tumors of the breast, removal without mutilation, 463.
Berlin, sanitary exhibition in, 83.
Bethlehem, Pa., smallpox in, 336.
Bidding for practice, 75.
Bilharzia hæmatobia, 404.
Births, multiple, 54.
Bite, snake, treatment of, 413.
Bladder; rupture of the, 210, 461; fungosities cured by scraping the, 573.
Blenorrhœa; treatment of, 31.
Blennorrhagia treated by chlorate of potash, 189.
Blennorrhagic pus, microbi of, 189.
Blood; of animals, infectiousness of, 129; in phthisis, 190; corpuscles, anatomy, physiology, and pathology of the, 467.
Bodies, from the ear, foreign, 41, 386.
Bogus diplomas, 440.
Bones, effects of hereditary syphilis on the, 20.
Book, useful, 195.
Blood letting; should be more frequently employed, 172; in inflammatory diseases, 365.
Boring the ears, 161.
Bougie, a new, 219.
Bowels, in peritonitis, aspiration of the, 13.
Brain; penetrating pistol wounds of the, 99; a remarkable wound of the, 219. 397; gunshot wound of the, 222; concussion of the, 253.
Breasts; excessive development of the 187; removal of tumors of, without mutilation, 463.
Bright's disease; 596; milk diet in, 103; what is it? 246; hypertrophy of the heart in, 302; and rheumatism, 651.
Bristly boy, 237.
British and American physicians in Paris, 447.
Bromides, how to use, 13.
Bromines, topically in chancroids and ulcers, 128.
Bronchitis, 596.
Buildings, school, 382.
Butter, American, in Ireland, 363.
Burns; 584; sucrate of lime liniment for. 188.
Burning of the hygienic exhibition in Berlin, 672.

Cachexia, syphilitic, 381.
Cadavers, preservation of, 165.
Cæsarean section, 414.
Calabar bean, 107.
Calcified adenoma of scalp, 160.
Calcium, unusual effect of the sulphide of, 378.
Calculi, nasal, 271, 386.
Calculus, disintegrated renal, 659.
Canal boat children, 278.
Cancer; the pre-cancerous stage of, 243; of the cervix uteri, 486.
Carbolic acid; as an external application to piles, 27; injections, 232; in diphtheria, 245; poisoning by, 328; or cucumber, 383.
Carcinoma; of the neck of the womb, 234; of the peritoneum and pleura, 595.
Cardiac; hypertrophy and renal disease, 209, 680; asthma, treatment of, 274; dyspnœa, 442.
Caries of the cuboid, 344.
Case; of precocious development, 27; of gout, joints from a, 129; of hernia, 138; of chronic hydrocephalus, 538; of sacculated aneurism, 678.
Cases; of trichinosis, 581; of poisoning from drinking impure water, 653.
Catarrhal fever, 289.
Catheterism, the dangers of, 299.
Cause; of malaria, 77; of conjunctivitis, 301.
Causes; frothing urine and its, 125; of diseases, the nature of, 131.
Cautery, galvano-, for epilation, 105.
Cavity of the abdominal abscess, 229.
Cellulose, digestion of, 684.
Centenarians, 56.
Cerebral lesions in syphilis, 659.
Cerebro-spinal meningitis in a newborn infant, 659.
Cerumen, impacted, 426.
Cervix uteri; laceration of the, 453; cancer of the, 486.
Cesspools, 607.
Ceylon, cultivation of cinchona in, 686.
Chancroids and ulcers, bromines in, 128.
Charity; a worthy, 223; organizations, 439.
Chemical causes of life, 608.
Children; school, investigations in regard to, 52; cirrhosis of the liver in, 154; be sent to school, when should, 326; headaches in, 384; young, intertrigo in, 582; newborn, inflammation of the eyes in, 656.
Childbed, temperature in, 182.
Chionanthus, virginica, 633.
Chinese coolies, endemic paraplegia among, 12.
Chloral; hydrate, croton, efficacy of, 14; injections in vomiting, 48.
Chlorate of potash in treatment of blennorrhagia, 189.
Chlorhydric acid, chlorosis treated by, 220.
Chloroform; and ether, death under, 112; the purity of, 218; in cholera, 303; impure, 352; action of, 576; mortality, 679.
Chlorosis treated by chlorhydric acid, 220.
Cholera, chloroform in, 303.
Chordee, new treatment for, 581.
Chorea; 648; from emotional excitement, 42; arsenical treatment of, 608.
Chronic; peritonitis, 20; rhinitis, 21; metritis, 47; kidney disease, 622.
Cigarettes, 77.
Cinchona cultivation; in Jamaica, 223; in Ceylon, 686.
Circumcision; as a sanitary precaution, 76; death from, 328.
Cirrhosis of the liver, 154, 680.
Cirsoid aneurism, 678.
Cleanliness next to godliness, 279.
Clinical; cases of surgical diseases of women, 85; lessons on syphilis, 161; introduction to studies in gynecology, 592.
Cliterodectomy, 105.
Closure of schools, for infectious diseases, 686.
Codeine, value of pure, 358.
Code of Ethics, 644.
College commencements, 334, 391.
Commissions to examine foods and articles of commerce, 271.
Compounds, protein, alkaloids derived from, 295.
Compounding a felony, 417.
Complications; of leprosy, 12; of phthisis, 652.
Compound dislocation of the ankle, 441.
Concussion of the brain, 253.
Conditions, influence of alcohol on diseased, 242.
Congenital; gastro-diaphragmatic hernia, 138;

dislocation of tibia, 222; absence of anus, 237; abnormality in production of hair, 404; club foot, 412; fistula in the sacral region, 468; teeth, 610; irideremia, 601; cardiac disease, 680.
Congress, International Medical, 336.
Constipation, treatment of, 200.
Consultations; 446; with homœopaths, 585; why not? 74.
Consumption, 475, 660.
Contagion, pet animals as carriers of, 609.
Contagiousness. post-mortem, of diphtheria, 132.
Contagious; pneumonia, 161, 303, 322; headache, 418.
Contribute to medical journals, how to, 241.
Control of medical education by the government, 411.
Convulsions; 460, 584; uræmic, 212.
Cook rice, how to, 671.
Cornea, ulcers of, 469.
Corn, a grain of, discharged through chest, 219.
Corpuscles of the blood, 467.
Corrections, 634.
Cough; of tuberculosis, 161; whooping, 300.
Croton chloral, hydrate, efficacy of 14.
Croup membranous, 27.
Croupous pneumonia in children, 568.
Cuboid, caries of the, 344.
Cucumber or carbolic acid, 383.
Cultivation of cinchona; in Jamaica, 223; in Ceylon, 686.
Cure; of cancer, prizes offered for, 392 of lichen ruber without arsenic, 660.
Curious; case of aneurism, 133; malformation, 195.
Cuticle, periodical peeling of the, 294.

Damiana, therapeutic effects of, 183.
Danger of administering anæsthetics without witnesses, 185.
Dangers of catheterism, 299.
Darwin memorial fund, 685.
Dead; bodies in supposed criminal cases, 78, 107; and missing for 1881, 83.
Deafness, engine drivers', 76.
Death; during depression of the tongue, 78; from imagination, 78; chloroform, 112; supposed hydrophobia, 195; pyæmia, 236; septicæmia, 251; asphyxia and phthisis, 351.
Delirium tremens, 379.
Dementia and idiocy, 273.
Dental nerve, stretching of the lower, 78.
Dentition, the disorders of primary, 393.
Depression of the tongue, 79.
Detection of impure water, 161.
Development; case of precocious, 27; of the breasts, 187.
Diabetes; and malaria, 47: insipidus treated by electricity, 219; alveolar osteo periostitis in, 301; mellitus, 507.
Diagnosis of ovarian tumors, 14.
Diamond cut diamond, 466.
Digestion of cellulose, 684.
Diphtheria; sulphurous acid in, 19; thymol in, 48; alcohol in, 50, 104, 277, 360; peritonitis, due to, 127; post-mortem contagiousness of, 132; investigations into, 195; carbolic acid in, 245; treatment of, 468.
Diphtheritic; contagium, 224; membrane, a new solvent for, 296; paralysis, treatment of 337.
Diplomas; American in Australia, 195; bogus, 440.
Directory for nurses, 474.
Disagreement among physicians, 223.
Discoveries, M. Pasteur's, 610.
Disease; Bright's 103; wool sorters' 154; Paget's, of nipple, 359; producing theatres, 495; of kidneys, 622.
Diseases; of pregnancy, 1, 225; of women, 85: infectious, 134, 162, 220, 248, 275; zymotic, 278; of the lachrymal apparatus, 462; special hospitals for infectious, 546; of the ankle joint, 582.
Disinfectants 303.
Disinfection; of urine, 414; of physicians' instruments, etc., 447.
Dislocation; of tibia, 222; of the ankle, 441; of vertebra, 442.
Dispensary for diseases of the ear, 27.
Dissecting knife, 52.
Does vaccination protect? 661.
Dressing of wounds, 21, 48.
Drinking impure water, poisoning from, 653.
Drugs, insanity from, 518.
Dysentery; hot water injections in, 20; ixora danduca in, 48; epidemic, 645, 673
Dysmenorrhæa, treatment of, 71.
Dyspeptic nurse, 190.
Dyspnœa, 442.

Ears; dispensary for diseases of the, 27; foreign bodies from the, 41, 386; bedbug in the, 132; puncture of the, 436.
Eclampsia, puerperal, 421.
Eczema; rubrum, 37; of the hands, 373; mask treatment of, 414.
Editorials—
A Review of a Year's Work, 17.
The Hygiene of Schools, 45.
The Spread of Smallpox, 45.
Why not Consult with Homœopaths? 74.
Bidding for Practice, 75.
Preparation for Medical Studies, 102.
Milk Diet in Bright's Disease, 103.
Steamer Surgeons, 130.
The Nature of the Causes of Disease, 131.
Sanitation and Public Education, 157.
The Germ Theory and Some of its Practical Results, 158.
Should Sick Men be Hung? 159.
Specialism in Medicine, 184.
The Danger of Administering Anæsthetics without Witnesses, 185.
Ethics Common to Physicians and Pharmacists, 215.
Inoculation, 216.
How to Contribute to Medical Journals, 241.
The Influence of Alcohol on Diseased Conditions, 242.
A New Departure in Medical Ethics, 269.
Commissions to Examine Adulterated Foods and Articles of Commerce, 271.
The Legal Responsibility of Physicians, 298.
New Remedies, 299.
The Dangers of Catheterism, 299.
Vivisection, 300.
When Should Children be Sent to School? 326.
Medical Science, 327.

Jaborandi, 354.
Higher Medical Education, 356.
Syphilitic Cachexia, 381.
School Buildings, 382.
Professional Liberalism, 382.
Professor Samuel D. Gross, 410.
Government Control of Medical Education, 411.
Vivisection, 412.
Puerperal Septicæmia, 412.
Railroad Surgeons, 438.
Charity Organizations, 439.
Bogus Diplomas, 440.
Higher Medical Education, 440.
Impressions, 465.
American Medical Association, 465.
Diamond Cut Diamond, 466.
The Advancement of Medicine by Research, 494.
University of Pennsylvania, 495.
Disease Producing Theatres, 495.
"The Follies of Fashion," 496
Subpœnas to Medical Men, 518.
Insanity from Drugs, 518.
Special Hospitals for Infectious Diseases, 546.
Venesection, 577.
Digitalis and Aconite, 606.
Salicylic Acid, 607.
A Model Infant Asylum, 631.
Endowment of Research, 658.
The Last Six Months, 682.
The Age of Bacilli, 682.
Education; higher medical, 440; medical, of the African race, 643; government control of, 411, 661.
Effects of prolonged bathing, 216.
Elasticity, arterial, 360.
Elbow, splint for fracture of, 398.
Electric lights, hygienic value of, 447.
Electricity; in labor, 46; in diabetes, 219.
Electrization, laryngeal, 469.
Elongation of the lingual nerve, 217.
Emma Abbott and vaccination, 167.
Endemic of paraplegia among Chinese coolies, 12.
Endo pericarditis, acute, 628.
Enlarged spleen, 385.
Ephidrosis, 103.
Epidemic; of rötheln in Alabama, 340; dysentery, 645, 673.
Epilepsy; produced by reflex irritation, 107; treatment of, 325; premonitions of, 331.
Epileptiform seizures, 351.
Epithelioma; of leg, 123; of the œsophagus, 442; primary, of the tonsil, 468.
Epulis, with profuse hemorrhages, 499.
Ergotine in pharyngitis, 220.
Ergot; in visceral atony, 523; in lead palsy, 359; for enlarged spleen, 385.
Erythema multiforma, 262.
Essays upon the radical cure of cancer, offered for prizes, 392.
Ether and chloroform, 113.
Etherization, fatality of, in chronic kidney disease, 622.
Ethics; in France, 139; code of, 644.
Etiology of malaria, 449.
Eucalyptus globulus in typhoid fever, 98.
Examination of dead bodies, 78, 107.
Excretion of nitrogen by the skin, 633.
Excessive development of the breasts, early n pregnancy, 187.
Excision; of the pylorus, 105; for sacculated aneurism, 678.
Exhibition, hygienic, at Berlin, burned, 672.
Expert testimony, 634.
Experts, opinion of, 112.
External; application of carbolic acid to piles, 27; genitals, iron ring around, 632; iliac, aneurism of the, 652.
Extirpation; of the thyroid glands, 111; of the lungs, 331; of the eye, 545; of the ovaries, for insanity, 575; of a pulmonary hernia, 583.
Extra-uterine fœtation, 94.
Extraction of teeth in pregnant women, 350.
Extravasation of urine, 113, 141.
Eye; osseous degeneration of the, 436; extirpation of the, 545; protector, for use with the monocular microscope, 566; inflammation of, in newborn children, 656.

Factors of albuminuria, 490.
Farcy, acute in man, 384.
Farms, vaccine, 671.
Fashion; vs. health, 76; follies of, 497.
Fatal; disease contracted from a horse, 84; peritonitis from a vaginal injection of acetate of lead, 189.
Fatality of etherization in chronic kidney disease, 622.
Feeding invalids, 685.
Felony, compounding a, 417.
Female doctors in Russia, 252.
Femur; fracture of, 119, 435.
Fever; *catarrhal*, 289; *intermittent*, 499; *malarial*, 81; *rheumatic*, 236; *scarlet*, 567; *typhoid*; 98; phenic acid in, 104; inoculation for, 343; iodine in, 385; *typho-malarial*, so called, 166; *yellow*, 320.
Fevers; intermittent and typhoid, antagonism of, 27.
Fibroid tumor of the uterus, 111, 432.
Fibrous tumor; of the uterine neck, 265; growing from sacrum, 499.
Filaria; medinensis, 187; sanguinis hominis, 209.
Fistula; 35; external biliary, 463; congenital, in the sacral region, 468.
Flesh worm, 498.
Floating kidney, 321.
Flowers in sleeping rooms, 160, 279.
Fœtation, extra uterine, 94.
Follies of fashion, 496.
Food, testing for lead in articles of, 188.
Forced; feeding in phthisis, 105; suspension of respiration, 418.
Foreign; growth, hemorrhage due to, 129; bodies from the ear, 41, 386: body in œsophagus followed by emphysema, 579.
Fowler's solution in the treatment of tetanus, 204.
Fracture; of vertebræ, 70, 442; of the shaft of the femur, 119; of elbow, splint for, 398.
Fractures, reducing, without anæsthetics, 139.
France; medical ethics in, 139; myopia in, 672.
Frontal headache, iodide of potassium in, 187.
Frothing urine and its causes, 125.
Fund, memorial, of Darwin, 685.
Fungosities of the bladder cured by scraping with the finger, 573.

Fungus, a new, 609.
Future, America of the, 307.

Galen, instruments in the time of, 295.
Gall bladder filled with gall stones, 625.
Gallo-Roman remains, 581.
Galvanic element for the treatment of constipation, 200.
Galvano-cautery, for epilation, 105.
Garroting physicians, apparatus for, 83.
Generation, on the determination of sex in, 484.
Genital irritation, 385, 632.
Germ theory, 158.
Girl, young, ovariotomy in a, 684.
Glycosuria, 64.
Godliness, cleanliness next to, 279.
Gonorrhœa in the male, 169, 197.
Gout, 129-279.
Government, control of medical education, 411, 661.
Grafting, sponge, 657.
Grain of corn discharged through the chest, 219.
Green oysters, 279.
Grindelia robusta, 244.
Gross; Professor S. D., 410; professorship of pathological anatomy, 644.
Guilds of health, 363.
Gunshot wound; of the abdomen, 188; of brain, 222.

Hair; follicles in the nose, 106; nits in the, 245.
Hæmatology, 160.
Hæmoglobinuria, 267.
Half knowledge, 307.
Halfpenny swallowed by a child and vomited five weeks afterward, 268.
Hay fever, prevention of, 107.
Heads, sizes of, 195.
Headache; 187; contagious, 418
Headaches; in children, 384; sick, 477.
Health; of New York, 77; a psalm of, 195; guilds of, 363.
Heart sounds, reduplication of, 96.
Hemorrhage; 408; due to foreign growth, 129; profuse, 499; transfusion of saline solutions in, 659.
Hereditary; syphilis, effects of, on the bones, 20; lead poisoning, 633.
Heredity, 685.
Hernia; case of, 138; of the ovary, 349; strangulated, 407; extirpation of a pulmonary, 583; inguinal, 677.
Herpes as an underlying cause of other diseases, 180.
Higher medical education, 356, 440.
Hints for the diagnosis of ovarian tumors, 14.
Hoang-nan and hydrophobia, 360.
Homicide by infection, 406.
Homœopaths, consultations with, 74, 585.
Hospital Reports—
Bellevue Hospital, New York—
Clinic of Austin Flint., M.D., 595.
College of Physicians and Surgeons—
Clinic of Francis Delafield, M.D., 314, 651.
" Abraham Jacobi, M.D., 399.
" Prof. Alonzo Clark, M.D., 401.
Hospital of Oral Surgery—
Clinic of Prof. Garreston, 35.
Hospital of the University of Pennsylvania—
Clinic of D. Hayes Agnew, M.D., 8.
" L. A. Duhring, M.D., 37, 92, 262.
" W. Goodell, M.D., 67, 234, 541.
" J. Ashhurst, Jr., M.D., 119.
" Wm. Pepper, M.D., 289, 625.
Jefferson Medical College Hospital—
Clinic of W. Thomson, M.D., 151.
Kentucky School of Medicine—
Clinic of J. M. Matthews, M.D., 488.
Medico Chirurgical College—
Clinic of F. Le Sieure Weir, M.D., 457.
Pennsylvania Hospital—
Clinic of R. J. Levis, M.D., 205.
" Dr. Jas. H. Hutchinson, M.D., 174, 373.
Philadelphia Hospital—
Clinic of J. M. Keating, M.D., 568.
St. Mary's Hospital, Philadelphia—
Clinic of H. Augustus Wilson, M.D., 9.
University of the City of New York—
Clinic of Wm. M. Polk, M.D., 486.
Western Pennsylvania Hospital, 65, 207, 346, 431.
Hospitals; purification of air in, 224; for infectious diseases, 546.
Hot water injections in the treatment of dysentery, 20.
How to cook rice, 671.
Hydatids of the liver, 43.
Hydrate of chloral, 14.
Hydrocele of the neck, 579.
Hydrocephalus, case of chronic, 538.
Hydrophobia; death from supposed, 195; pathology of, 212, 360.
Hygiene; of schools, 45; and public education, 247.
Hygienic; value of electric lights, 447; exhibition at Berlin burned, 672.
Hymen, imperforate, 609.
Hyoscyamia as a depressor motor, 238.
Hypertrophy, cardiac, 209.
Hypopyon, 443,
Hypertrophied heart, 327.
Hypertrophy; of legs, 205; of the heart in Bright's disease, 302; of the prepuce, 414.
Hypnotism, 386.
Hypodermic injections: 21; of quinine, 106; of sulphuric ether, 324; of carbolic acid, 232.
Hysterical retention of urine in a man, 508.

Incontinence of urine, 583.
Idiocy; and dementia, 273; and imbecility, 533, 561.
Idiopathic retro-pharyngeal abscesses, 313.
Ignipuncture, tonsillotomy by, 358.
Iliac, external, aneurism of the, 652.
Illiteracy, American, from, an English source, 252.
Illness caused by filth in milk, 274.
Imagination, a cause of death, 78.
Imperforate hymen, 609.
Impressions, 279, 465.
Impure; water, 161, 653; chloroform, 352.
Incised wound of the skull, 211.
Inconsistency of philanthropists, 686.
Indications for the use of morphia in puerperal eclampsia, 19.
Infant; sucking, inoculation of syphilis by a,

491; asylum, a model, 631; newborn, cerebro-spinal meningitis in, 659.
Infants, hospital for, 586.
Infantile unfoldment, 256.
Infection, homicide by, 406.
Infectious diseases, 134, 162, 220, 248, 275, 546, 686.
Infectiousness of blood and urine of tuberculous animals, 129.
Infectivity of scarlet fever, 575.
Inflammation; of the hair follicles of the nose, 106, 216; of the eyes in new-born children, 656.
Inflammatory diseases, 365.
Influence of alcohol, 242.
Inguinal hernia, 677.
Injections; hot water, 20; hypodermic, 21; in vomiting, 48; of iodoform in syphilis, 273.
Injuries to the nails, 187.
Inoculation; for typhoid fever, 343; for pannus, 294; caused by a sucking infant, 491;
Insanity; 363; a cause for divorce, 139; from drugs, 518, 532; the African treatment of, 580.
Insipidus treated by electricity, 219.
Instances of longevity, 252.
Insurance, by medical men, 572.
Intermittent; fevers, 27; fever and quinine hypodermically, 499.
International; Medical Congress, 336; group, 585.
Interosseous branch of deep palmar arch, aneurism of the, 678.
Intertrigo in young children, 582.
Intestinal invagination, 133, 272.
Intestine, tubercular ulceration of, 497.
Intussusception, 656
Introduction to studies in clinical gynecology 592.
Invalids, feeding of, 685.
Investigations; with regard to school children, 52; into the alleged germ origin of malarial fevers, 96; into diphtheria, 195.
Iodide; of potassium in frontal headache, 187; of potash in pneumonia, 497.
Iodine in typhoid fever, 385.
Iodoform; spray, use of, 190; in orchitis, 245; for soft sores, 467.
Irideremia, two cases of congenital, 601.
Irish, longevity among the, 167.
Irritation, genital, 385.
Irritating subcutaneous injections of nitrate of silver, 404.
Iron ring around external genitals, 632.
Italian, American work translated into, 476.
Ixora dandnca in dysentery, 48.

Jaborandi; 354; and pilocarpine, therapeutic use of, 115; as a diaphoretic, 584.
Jamaica, cultivation of cinchona in, 223.
Joints from a case of gout, 129.
Juvenile alcoholism, 95.

Kangaroo tendons, 330.
Kidney; floating, 321; disease, the fatality of etherization in chronic, 622.
Knee, joint, suppurative synovitis of the, 371.
Knife swallowed by an infant, 359.

Labor; electricity in, 46; nitrous oxide as an anæsthetic during, 160.
Laceration of the cervix uteri, 453.
Lachrymal apparatus, 462.
Larkspur: therapeutic action of, 499.
Laryngeal; diphtheria, 27; electrization, 469 anæsthesia, 609.
Lead; testing for, 188; palsy, ergot in, 359; poisoning, 633.
Leg, epithelioma of, 123.
Legal responsibility of physicians, 298.
Legs, hypertrophy of, 205.
Leprosy; complications of, 12; bacteria a cause of, 133.
Lesions, cerebral, in syphilis, 659.
Lessons on syphilis, 161.
Lethargy, recurring, 247.
Letter from Europe, 472.
Leucorrhœa of pregnancy, 7.
Liberalism, professional, 382.
Lichen ruber cured without arsenic, 660.
Life, the chemical cause of, 508.
Ligature; subcutaneous in varicocele and varix, 68; of arterial trunks, 604.
Lights, electric, value of, 447.
Linear; rectotomy for syphilitic stricture of the rectum, 181; scarifications in lupus, 300.
Lingual nerve, elongation of the, 217.
Liniment for burns, 188.
Lithotrity; at a single setting, 155; after treatment of, 377.
Liver; hydatids of the, 43; abscess of the, 65; cirrhosis of the, 154, 314, 680.
Local; treatment of aphthous stomatitis, 302; activities, can two coexist, 634.
Locked twins, 403.
Locomotor ataxy; following smallpox, 190; stretching in, 328.
London, ambulance service in, 224.
Longevity; among the Irish, 167; instances of, 252.
Lower; stretching of dental nerve, 78; jaw, sarcoma of the, 431.
Lungs, extirpation of the, 331.
Lupus; micrococci in, 156; linear scarifications in, 300; non-exedens, 676.
Luxation of the unciform bone, 418.

Machines, sewing, ataxy and, 414.
Malaria; and diabetes, 47; cause of, 77; etiology of, 449.
Malarial fever; 38, 81, 98, 104, 166; investigations into, 96.
Malformation; of the urethra, 137; curious, 195.
Malignant disease vs. syphilis, 603.
Malignancy, acute, traumatic, 574.
Man, farcy in, 384.
Management and dressing of wounds, 21, 48.
Mania, transient, 132.
Martin's bandage in the treatment of the patella, 537.
Maternal impressions, 279.
Measles, German, 42.
Medical; studies, preparation for, 102; ethics; 269; in France, 139; journals, how to contribute to, 241; practice, South Africa as a field for, 279; science, 327; congress, international, 336; Aid Association, a plea for, 342; college, 391; education, 356, 411, 440; of the African race, 643; control of 661; men; subpœnas to, 518, insurance of, 572; group, 585.

Medicine; in Japan, 129; the thermometer and its use in, 145; progress of, 167; specialism in, 184; in New Mexico, 475; by research, the advancement of, 494.
Medical Societies:—
American Medical Association, 641, 661.
American Surgical Association, 634.
Camden County Medical Society, 586.
College of Physicians, 601, 653.
Fulton County (N. Y.) Medical Society, 336.
Iowa State Medical Society, 320.
Kansas State Medical Society, 685.
Kentucky State Medical Society, 443.
Laryngological, of Philadelphia, 320, 602, 629.
Massachusetts State Medical Society, 686.
New York State Medical Society, 141.
Northern Medical Society of Philadelphia, 459, 655.
Obstetrical Society of Philadelphia, 94, 177, 317, 432, 598.
Pennsylvania Medical Society, 519, 547.
Rhode Island Medical Society, 38.
Medico-legal importance of injuries to the nails, 187.
Medinensis, filaria, 187.
Membrane, diphtheritic, new solvent for, 296.
Membranous croup and laryngeal diphtheria, 27.
Memorial fund to Darwin, 685.
Memory, tribute to Dr. Pancoast's, 336.
Meningitis, cerebro-spinal, in a newborn infant, 659.
Menstruation, premature, 76.
Mental aspects of infantile unfoldment, 309.
Mercurial solution for hypodermic injections, 21.
Mercury in syphilis, 239, 632.
Metritis, chronic, tannin in, 47.
Micro-germs, 611.
Microbi of blennorrhagic pus, 189.
Micrococci in lupus, 156.
Miliary tuberculosis, 368, 652.
Milk; diet in Bright's disease, 103; illness caused by filth in, 274.
Miners' anæmia, 413.
Missing and dead for 1881, 83.
Mississippi Valley, sanitary council of the 559.
Mitral; disease following rheumatism, 175; stenosis, 330.
Model infant asylum, 631,
Modern surgery, 331.
Monocular, microscope, eye protector for use with the, 566.
Monstrosity, remarkable, 350.
Morphia; in puerperal eclampsia, 19; poisoning, 430, 615.
Mortality from chloroform, 679.
Multiforma, 262.
Multiple births, 54.
Muriate of ammonia as an anthelmintic, 20.
Mustard in the treatment of smallpox, 278.
Mutilation of the ovary in situ, 18.
Myopia in France, 672.

Nails; medico-legal importance of injuries to the, 187.
Narrow-minded physician, 307.
Nasal calculi, 271, 386.
Nature of the causes of disease, 131.
Neck; of the womb, carcinoma of, 234; of the femur, division of the, 435.
Nerve; cells, 33, 61, 85; lingual, elongation of the, 217; stretching in locomotor ataxy, 328; element in whooping cough, 379; spinal; 493; accessory, 441.
Nerves; regeneration of, 301.
Nervous and spasmodic affections in acupuncture, 186.
Neuralgia; 35; ovarian, 441; saturnine, 629.
New; York, health of, 77; purgative, 161; departure in medical ethics, 269; Castle on Tyne, Sanitary Congress at, 279; solvent for diphtheritic membrane, 296; Mexico, practice of medicine in, 475; vesicant, 659.
Newborn; children, inflammation of eyes in, 656; infant, cerebro-spinal meningitis in, 659.
Night sweating; picrotoxine in, 54; inphthisis, 405.
Nipples, cracked, 359.
Nitrate of silver injections, 404.
Nitrogen excreted by the skin, 633.
Nitrous oxide as an anæsthetic during labor, 160.
Nits in the hair, 245.
Nurse, dyspeptic, 190.
Nurses, directory for, 474.
Nutrient suppositories, 330.

Obituary Notices:—
Dr. James M. Shearer, Professor Pirogoff, Dr. Briquett, 28; Professor John W. Draper, Dr. Edward Reynolds, 56; Dr. Wm. E. Butler, Dr. Orlando Fairfax, Dr. George W. Pape, 84; Dr. Brierre De Boismont, Dr. F. Meyer, Dr. Maurice Beesley, 140; Sir Robert Christison, M.D., 168; Dr. M. C. Dean, Mrs. M. S. Crosby, Dr. Joseph Barrett, Dr. Theo. Schwann, 196; Drs. George T. Campbell, Charles F. Stansbury, Isaac H. Conrad, James C. Jackson, 224; Drs. Theo. L. Mason, Robert Bridges, Samuel Whitall, Victor Theodore Junod, Lucius L. Pettingill, 280; Dr. Joseph Pancoast, 308; Dr. David King, Clifford Morrogh, 364; Dr. Thos. Potts James, 420; Drs. John Osborn, J. M. Leon, William Gould, 448; Dr. James R. Wood, 587; Drs. John T. Hodgen, Erskine Mason, John E. Gilbert, 588; Sir John Rose Cormack, 672; Drs. John W. Corson, J. J. Jennings, 686.
Obligatory vaccination in Switzerland. 224.
Obscure cases, 390,
Œsophagus; epithelioma of the, 442; rupture of the, 608.
Old hospital, 195.
Operations in individuals subject to erysipelas, 329.
Ophthalmia, 54, 151.
Ophthalmitis, 9.
Opinion of experts, 112.
Opium; habit, 53; adulterated, 188.
Oral surgery, 247.
Organizations, charity, 439.
Orchitis, iodoform in, 245.
Osseous degeneration of the eye, 436.
Ostitis, pyæmia from, 329.
Os uteri, occlusion of the canal of the, 433.
Our Continent, 247.
Ovarian; tumors, hints for, 14; neuralgia, supposed, 441; cyst, 541.
Ovaries, extirpation of the, for insanity, 575.
Ovariotomy, 67, 224, 443, 684.
Ovary; in situ, 18; hernia of the, 349.

Oysters, green, 279.
Ozæna; true, 126; treatment of, 182.

Paget's disease of the nipple, 359.
Palsy, lead, ergot in, 359.
Pancreas, abscess of the, 244.
Papaine in diphtheritic conjunctivitis, 132.
Papilloma of the right vocal cord followed by acute phthisis, 424.
Paracentesis, 680.
Paralysis; simulating plumbic wrist drop, 98; treatment of, 337; treated by extension, 357; of the uterus, 435.
Paronychia gangrænosa, 610.
Paroxysmal hæmoglobinuria, 267.
Pathology; of hydrophobia, 212; of blood corpuscles, 467.
Peculiar case, 443.
Pelletierinum tannicum, 633.
Pemphigus, treatment of, 328.
Penetrating pistol wound of the brain, 99.
Pericarditis; 57; in uræmia, 610.
Perineum, restoration of the, 85.
Perinephritis and cirrhosis of the liver, 314.
Peritonitis; aspiration of the bowels in 13; chronic general, 20; apparently due to diphtheria, 127.
Pertussis, treatment of, 660.
Pet animals as carriers of contagion, 609.
Phagedenic; ulcers, 161; sulphide of carbon and iodoform in, 245.
Pharmaceutical preparations, 167, 307.
Pharyngitis, ergotine in, 220.
Phenic acid in typhoid fever. 104.
Philanthropic inconsistency, 686.
Phosphates in phthisis, 660.
Photographic group of the International Medical Congress, 585.
Phthisis; forced feeding in, 105; asphyxia in 351; night sweats in, 405; warm ox blood in, 190; with complications, 652; the phosphates in, 660.
Physical aspects of infantile unfoldment, 256.
Physicians; apparatus for garroting, 53; and pharmacists, ethics common to, 215; disagreement among, 223; legal responsibility of, 298; narrow minded, 307; in Paris, 447.
Physiological; effects of prolonged bathing, 216; and therapeutic effects of phosphorus, 325.
Physiology of atropia, 617.
Picrotoxine in night sweating, 54.
Pigmented; spots on the skin, treatment of, 301; mole of abdomen, 408.
Piles, external application to, 27.
Pilocarpine; therapeutic use of, 115; in croup, accidents from, 268.
Pink eye in horses, 97.
Placenta; prævia, 260; prolonged retention of the, 285.
Plastic splints in surgery, 629.
Plea for medical aid associations, 343.
Pleurisy, purulent interlobar, 589.
Pneumonia; 161, 303, 322; venesection in, 190, 399; urine of acute, 460; potash in, 497; in children, 568.
Points in the physiology and therapeutics of atropia, 617.
Poisoning; by aconite, 77, 386; by stramonium, 243; by chromate of lead in weavers, 272; by carbolic acid, 328; by anacardium, 362; by nitrate of potash, 413; by ammonia, 466 from sardines, 609; by morphia, 615; by lead 633; by impure water, 653.
Potash, blennorrhagia treated by, 189.
Post-mortem contagiousness of diphtheria, 132.
Practice; bidding for, 75; of medicine in New Mexico, 475.
Practical results of the germ theory, 158.
Pregnancy; diseases of, 1, 225; leucorrhœa of 7; complicated by a fibroid tumor of the uterus, 111; albuminuria in, 165; excessive development in, 187; with epithelioma, 384; signs of, 442.
Pregnant women, extraction of teeth in, 350.
Premonitions of epilepsy, 331.
Preparation for medical studies, 102.
Preparations, pharmaceutical, 167, 307.
Prepuce, hypertrophy of, 414.
Preservation of cadavers, 165.
Prevention; of hay fever, 107; of the zymotic diseases, 278; of venereal diseases, 447.
Primary epithelioma of the tonsil, 468.
Procidentia, with rigidity of the os as a cause of death in labor, 540.
Progress of medicine, 167.
Prof. Pancoast's memory, tribute to, 336.
Professional liberalism, 382.
Prolonged; bathing, 216; retention of the placenta, 260.
Properties of wintergreen, 133.
Pruritus ani, 584.
Ptyalism in insanity treated by neutral sulphate of atropine, 188.
Public education; sanitation and, 157; hygiene and, 247.
Puerperal; eclampsia, 19, 421; septicæmia, 377, 412, 498; albuminuria, 395,583; hemorrhage, 408; convulsions, 460, 584.
Pulmonary; gangrene, 245; abscesses opened antiseptically, 573; hernia, extirpation of a 583; consumption, 660.
Puncture and aspiration in intestinal invagination, 272.
Purity of chloroform, 218.
Purification of air in hospitals, 224.
Pyæmia; death from, 236; from ostitis, 329.
Pylorus, excision of the, 105.

Quadruple amputation, 77.
Quebracho, 264.
Quinine hypodermically, 499.
Questions relating to vaccination, 55, 502.

Rabid dogs, treatment of wounds from supposed, 19.
Rabies, treatment of, 329.
Race, African, medical education of the, 643.
Radical cure of cancer, essays upon, 392.
Railroad surgeons, 438.
Ranula, 497.
Recovery; from pulmonary consumption, 660; from paracentesis of liver, 680.
Recurring lethargy, 247.
Reducing fractures without anæsthetics, 137.
Red sweat, 516.
Reduplication of heart sounds, 96.
Regeneration of nerves, 301.
Remarkable; wound of the brain, 219, 397; monstrosity, 350; case of sacculated aneurism, 678.

Remedies, new, 299.
Removal of the whole uterus for cancer, 246.
Renal; lithotomy, 271; calculus, 659.
Report of national board of health for 1879, 409.
Research; the advancement of medicine by, 494; endowment of, 658.
Resection of a portion of the stomach, 582.
Resorcine and its employment in therapeutics, 359.
Respiration, forced suspension, of 418.
Responsibility of physicians, 298.
Results of the germ theory, 158.
Retention of urine, 508.
Retro-pharyngeal abscesses, 313.
Revaccination, 585.
Review of a year's work, 17.
Reviews and Book Notices—
Allingham.—Fistula—Hemorrhoids, 213.
Ashhurst.—International Encyclopœdia of Surgery, 214.
Beard.—The Study of Trance, 240.
Bramwell.—Diseases of the Spinal Cord, 657.
Brown.—Clinical Handbook of Diseases of Women. 409.
Bruen.—Physical Diagnosis, 72.
Buck.—Treatise on Hygiene and Public Health, 240.
Bulkley.—Manual of Diseases of the Skin. 605.
Charcot.—Nervous System and Spinal Cord, 73.
Coleman.—Dental Surgery and Pathology, 409.
Coles.—The Nurse and Mother. 16.
Cutter.—Percussion Outlines, 297.
Dalton.—Human Physiology. 214.
Duhring.—Diseases of the Skin. 681.
Dwight.—Frozen Sections of a Child, 101.
Edis.—Diseases of Women, 214.
Ellis.—Illustrations of Dissections, 213.
Faught.—An Index of Physiology, 380.
Fothergill.—Chronic Bronchitis, 464, 681.
Fowler.—Suppression of the Urine, 101.
Gilliam.—Physicians' Perpetual Visiting List, 409.
Glenn.—Lectures on Venereal Diseases, 464.
Hamilton.—Nervous Diseases. 73.
Hartman.—Diseases of the Ears and their Treatment. 15.
Henoch.—Lectures on Diseases of Children, 517.
Holmes.—System of Surgery, 16–240.
Hubbard.—The Opium Habit and Alcoholism, 15.
Jones.—A Treatise on Aural Surgery, 100.
Kane.—Opium Smoking in America and China, 213.
Keetley.—An Index of Surgery, 297.
King.—A Manual of Obstetrics, 605.
Maisch.—Organic Materia Medica, 72.
Marriage and Parentage, 240.
Mauthner.—The Sympathetic Diseases of the Eye. 214.
Meadows.—Manual of Midwifery, 44.
Noyes.—A Treatise on Diseases of the Eye, 101.
Oswald.—Physical Education, 464.
Palmer.—A Treatise on the Science and Practice of Medicine, 464.
Phillips.—Materia Medica and Therapeutics, 657.
Potter.—An Index of Comparative Therapeutics, 605.
Rockwell.—Lectures on Electricity, 101.
Stein.—A Study of the Tumors of the Bladder, 101.
Stowell.—Histology, 681.
Tilt.—Uterine Therapeutics and Diseases of Women, 73.
Transactions of the Medical Society of New Hampshire, 73; of the American Medical Association, 240; of the Medical Society of Pennsylvania, 545.
Tyndale.—Home and Climatic Treatment of Pulmonary Consumption, 380.
Von Trœltsch.—Diseases of the Ear in Children, 681.
Walsh.—Physician's Call Book and Tablet, 16; Physician's Handy Ledger, 44.
Waring.—Sanitary Drainage of Houses and Towns, 297.
Rheumatic fever. 236.
Rheumatism; acute articular, 132; mitral disease following, 175; a cause of purulent conjunctivitis, 301; Bright's disease and, 651.
Rhinitis, chronic, 21.
Rice, how to cook it, 671.
Ring; theatre, victims of the, 293; iron, around external genitals, 632.
Rötheln in Alabama. 340.
Rupture of the bladder, 210, 461.

Sacculated aneurism, 678.
Sacral region, fistula in the, 468.
Sacrum, fibrous tumor growing from, 499.
Salicylic cream, 301.
Salicylate of soda in variola, 353.
Saline solutions, transfusion of, in hemorrhage, 659.
Sanguinis hominis, 209.
Sanitary; precaution, circumcision as a, 76; exhibition in Berlin, 83; convention, 167; council of Mississippi valley, 559.
Sanitation and public education, 157.
Sarcoma of the lower jaw, 431.
Saturnine neuralgia, 625.
Scalp, calcified adenoma of, 160.
Scarifications, linear, in lupus, 300.
Scarlatina, treatment of, 217.
Scarlatinous virus, permanence of the, 372.
Scarlet fever; in a puerperal woman, cold treatment of, 567; infectivity of 575.
School children, investigations with regard to, 52, 326, 382.
Schools, hygiene of, 45, 686.
Science, medical, 327.
Scraping, for the cure of fungosities of the bladder, 573.
Scriveners' palsy, 186.
Scrofula and tuberculosis, 273.
Section; cæsarean, 414; of the spinal accessory nerve, 441.
Seizures, epileptiform, 351.
Self abortion, 41.
Sensation of thirst, 246.
Septicæmia; death from, 251; puerperal, 377, 412, 498.
Severe illness caused by ingestion of cakes and cheese, 273.
Sewage water, utilization and purification of, 82.
Sewer gas and puerperal septicæmia, 498.

Sewing machines and ataxy, 414.
Sex, determination of, in generation, 484.
Shaft of the femur, fracture of, 119.
Sick; men, should they be hung? 159; headaches 477.
Signs of pregnancy, 442.
Silver, nitrate, injections of, 404.
Simple mitral stenosis, 505.
Sir Robert Christison's successors, 364.
Sizes of heads, 195.
Skin; atrophy of, 39; grafting, 106; pigmented spots on, 301; excretion of nitrogen by the, 633.
Skull, incised wound of the, 211.
Sleeping rooms, flowers in, 160, 279.
Smallpox; spread of, 45, 222; followed by ataxy, 90; hospitals, 110; and the paper makers; 133: in Philadelphia, 139; a good way to increase, 139; horrors of 139; locomotor ataxy following, 190; pustulation in the fœtus in utero, 245; treated by mustard, 278; and vaccination, 288; disinfectants, 303; in Bethlehem, Pa., 336.
Snake bite, treatment of, 413.
So-called typho-malarial fever, 166.
Society, alumni, of Pa. University, 336.
Soda, salicylate of, in variola, 353.
Soft sores, iodoform in, 467.
Solution; mercurial, for hypodermic injections, 21; Fowler's, in tetanus, 204; saline, transfused, in hemorrhage, 659.
Solvent for diphtheritic membrane, 296.
Some: of the practical results of the germ theory, 158; points in the physiology and therapeutics of atropia, 617.
Sounds of the heart, reduplication of, 96.
South Africa as a field for medical practice, 279.
Spasmodic affections, acupuncture in, 186.
Special hospitals for infectious diseases, 546.
Specialism in medicine, 184.
Special Reports--
Management and dressing of wounds, 21, 48.
On the examination of dead bodies in supposed criminal cases, 78, 107.
Infectious diseases, 134, 162, 220, 248, 275.
Adulterations, 304, 360, 415, 500.
Ophthalmology, 331, 387, 469.
Micro germs, 611.
Specific treatment of zoster, 562.
Spinal accessory nerve, section of the, 441.
Spinal nerve, resection of the, 493.
Sphygmograph, 378.
Splenotomy not a justifiable operation in leucocythæmia, 266,
Spleen, enlarged, ergot for, 385.
Splint; for fracture of elbow, 398; plastic, in surgery, 629.
Sponge; tents, 177; grafting, 657.
Spots on the skin, 301.
Spread of smallpox, 45.
Spray, iodoform, use of, 190.
Stage, pre-cancerous, of cancer, 243.
State hospital for women and infants, 586.
Statistics; vital, 112; of consumption, 475.
Steamer surgeons, 130.
Stenosis. simple mitral, 505.
Step backward. 307.
Stomach, resection of a portion of, 582.
Stomatitis, aphthous, 302.
Stones in the gall bladder, 625.
Strangulated hernia, 407.
Stramonium, poisoning by, 243.
Stretching; of the lower dental nerve, 78; of nerves in locomotor ataxia, 328.
Studies; medical, preparation for, 102; in gynecology, 592.
Styptic colloid, 223.
Subcutaneous; ligature in varicocele, 68; injections in syphilis, 239, 273.
Subpœnas to medical men, 518
Successful sponge grafting, 657.
Successors to Sir Robert Christison, 364.
Sucking infant, inoculation by, 491.
Sucrate of lime liniment for burns, 188.
Sudden death during depression of the tongue, 78.
Suicide, 124.
Sulphate of atropine in ptyalism, 188.
Sulphide; of carbon and iodoform in phagedænic ulceration, 245; of calcium, unusual effect of, 378.
Sulphuric ether, hypodermic injections of, 324.
Sulphurous acid in the treatment of diphtheria, 19.
Suppurative synovitis of the knee joint, 371.
Supposed; rabid dogs, treatment of wounds from, 19; criminal cases, examination of dead bodies in, 78, 107; hydrophobia, death from, 195; ovarian neuralgia, 441.
Suppositories, nutrient, 330.
Surgeons; for steamers, 120; railroad, 438.
Surgery; oral, 247; modern, 331; aids music, 363; plastic, splints in, 629.
Surgical; diseases of woman, 85; instruments in the time of Galen, 295.
Susceptibility to variola, 26.
Suspension, forced, of respiration, 418.
Swallowing; a halfpenny, 268; a knife, 559.
Sweats, night, picrotoxine in, 54; in phthisis, 405; red, 516.
Switzerland, obligatory vaccination in, 224.
Sympathetic ophthalmia, 151.
Synovitis of the knee joint, 371.
Syphilis; hereditary, its effects on the bones, 20; lessons on, 161, 488; can a man have it twice, 210; from epidermic grafting, 218; treated by subcutaneous injections of mercury, peptones and ammonia, 239; of iodoform, 273; albuminate of mercury in, 632; cerebral lesions in, 659.
Syphilitic; gumma, 93; stricture of the rectum, 181; cachexia 381; diseases of the lachrymal apparatus, 462: inoculations caused by a sucking infant, 491.
Syphiloderma, 457.
Systemic activities, can two coexist, 684.

Tannin in chronic metritis, 47.
Talipes varus, 8.
Teeth; extraction of, in pregnant women, 350; congenital, 610.
Temperature; in acute abscess, 47; in childbed, 182.
Temperatures, high local, 127.
Tendons, kangaroo, 330.
Tents, sponge, 177.
Test for pepsin, 223.
Testicle, undescended, 632.
Testimonial to Professor Leidy, 671.
Testimony, expert, 634.
Testing for lead in articles of food, 188.

Tetanus; treatment of, 20, 51, 207; traumatic 51, 219, 362.
The; coming sanitary congress at New Castle on Tyne, 279; clock said his time had come, 363.
Theatres, disease producing, 495.
Theory, the germ, 158.
Therapeutic; effects of damiana, 183; of phosphorus, 325; use of jaborandi, 115; action of larkspur, 499.
Therapeutics; alcohol in, 128; resorcine in, 359; of atropia, 617.
Thermometer and its use in medicine, 145.
Thirst, the sensation of, 246.
Thymol in diphtheria, 48.
Thyroid gland, extirpation of by enucleation, 111.
Tibia, dislocation of, 222.
Tinea tonsurans; 92; bald, 516.
Tonic pills, 376.
Tonsil; epithelioma of, 468; sarcoma of, 610.
Tonsillotomy, by ignipuncture, 358.
Topical use of bromines in chancroids and ulcers, 128.
Tracheotomy, 605.
Transfusion, 434, 659.
Transient mania, 132.
Translation of American work into Italian, 476.
Traumatic; ophthalmitis; enucleation, 9; sympathetic ophthalmia, 151; acute malignancy, 574; tetanus, 51, 219, 362.
Treatment; of abscess, 13; of aphthous stomatitis, 302; of blenorrhœa, 31; of blenorrhagia, 189; of asthma, 274; of chlorosis, 220; of chordee, 581; of diabetes, 219; of diphtheria, 19, 468; of diphtheritic paralysis, 337; of dysmenorrhœa, 71; of eczema, 414; of epilepsy, 325; of tetanus, 20, 51, 204, 207; of constipation, 200; of dysentery, 20; of insanity, 580; in lithotrity, 377; of fractured patella, 537; of smallpox, 278; of ozæna, 182; of paralysis, 357; of pemphigus, 323; of pigmented spots on the skin, 301; of ptyalism, 188; of wounds from rabid dogs, 19; of rabies, 329; of scarlatina, 217; of scarlet fever, 567; of snake bite, 413; of syphilis, 239; of scrofulous ulcers of the cornea, 469; of uræmic convulsions, 212; of fractures of the vertebræ, 70; of whooping cough, 300; of yellow fever, 302; of zoster, 502; of stricture, 602: of chorea, 608: of pertussis, 660; of sacculated aneurism, 678.
Tribute to Dr. Pancoast's memory, 336.
Trichinosis, two probable cases of, 581.
Triplets (prolonged labor), 348.
Trophic nerve cells, 33, 61, 85.
True ozæna, 126.
Tubercular ulceration of intestine, 497.
Tuberculosis; 273; cough of, 161; miliary, 368, 512, 651.
Tuberculous animals, infectiousness of blood and urine of, 129.
Tumor; of the breast removed without mutilation, 463: of the uterus, 111, 265, 432; from sacrum, 499.
Twins, locked, 403.
Typhoid; and intermittent fevers, antagonism of, 27; eucalyptusglobulus in, 98; phenic acid in, 104; inoculation for, 343; with complications, 346; iodine in, 385.
Typho-malarial fever, so-called, 166.
Ulceration of intestine, 497.
Ulcer of the rectum, 48.
Ulcers; bromines in, 128; phagedenic, 161; of the cornea, scrofulous, treatment of, 469.
Unfoldment, physical, of infants, 256.
University of Pennsylvania: alumni meeting, 336; recognition of alumni, 495.
Unusual effect of the sulphide of calcium, 378.
Uræmia, pericarditis in, 610.
Uræmic convulsions treated by vapor baths and chloral, 212.
Urethra, malformation of the, 137.
Urine; extravasation of, 113, 141, 143; frothing, 125; of tuberculous animals, infectiousness of, 129; alkapton in, 238; disinfection of, 414; of acute pneumonia, 466; hysterical retention of, in a man, 508; incontinence of, 583.
Use; of bromides, 13; of morphia in puerperal eclampsia, 19; of jaborandi, 115; of the thermometer in medicine, 145; of iodoform spray, 190; of eye protector with the monocular microscope, 566.
Useful book, 195.
Uterine: colic, caused by a leech in the uterus, 190; fibroids, 201, 358.
Uterus; ruptured, 125, 539; removal of, 246, 432; paralysis of, 435; fibrous tumor of, 111, 499.
Utilization of sewage water, 82.

Vaccination: Emma Abbott and, 167; compulsory in Indiana, 447; notes, 252, 288; obligatory in Switzerland, 224; question, 55, 502; does it protect? 661.
Vaccine farms, 671.
Vaccino-tuberculosis and vaccino-syphilis, 322, 473.
Vaccinator, an enterprising, 223.
Vaginal injection of acetate of lead, peritonitis from, 189.
Value; of pure codeine, 358; hygienic, of electric lights, 447.
Vapor baths in uræmic convulsions, 212.
Varicocele and varix, subcutaneous ligature in, 68.
Variola; susceptibility to, 26; salicylate of soda in, 353.
Venereal diseases, prevention of, 447.
Venesection; 577; in pneumonia, 190, 399.
Vertebra; fractures of the, treatment of, 70; fracture and dislocation of, 442.
Vesicant, a new, 659.
Victims of the Ring Theatre in Vienna, 293.
Virus, scarlatinous, permanence of the, 372.
Visceral atony, ergot in, 323.
Vital statistics, 112.
Vivisection, 195, 300, 412.
Vocal cord, papilloma of, followed by acute phthisis, 424.
Vomiting; chloral injections in, 48; of pregnancy, 247; a penny five weeks after swallowing it, 268.
Vowels and consonants, 18.

Warm ox blood in phthisis, 190.
Water; impure; detection of, 161; poisoning from, 653; hot, in dysentery, 20; sewage, utilization and purification of, 82.
Way to increase smallpox, 139.

Weavers, poisoning of, by chromate of lead, 272.
Webbed fingers, 266.
What is Bright's disease? 246.
When; a lady's horse shies, 278; should children be sent to school, 336.
Whooping cough; treatment of, 300; nerve element in, 379.
Why not consult with homœopaths? 74.
Wintergreen, properties of essence of, 133.
Witnesses, danger of administering anæsthetics without, 185.
Woman, puerperal, cold treatment of scarlet fever in, 567.
Womb, carcinoma of the, 234.
Women, surgical diseases of, 85.
Wool sorters' disease, 154.
Work; American, translated into Italian, 476; review of a year's, 17.
Working, zone of anæsthetics, 185.
Worthy charity, 223.
Worm, a flesh, 498.
Wound; of the brain, 99, 219, 222, 397: of the abdomen, 188; of the skull, 211; of left lung, 211.
Wounds; from rabid dogs, treatment of, 19; dressings of, 21, 48.
Wrist drop, 98.
Writers' cramp, or scrivener's palsy, 186.

Xanthopsis, 272.

Year's work, a review of, 17.
Yellow; fever, nature and treatment of, 302; aconite, poisoning by, 386.
Young; children, intertrigo in, 582; girl, ovariotomy in a, 684.

Zone, working, of anæsthetics, 185.
Zoster, specific treatment of, 502.
Zymosis, puerperal, 582.
Zymotic diseases, prevention of the, 278.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1297.] PHILADELPHIA, JANUARY 7, 1882. [Vol. XLVI.—No. 1.

Original Department.

Lecture.

THE DISEASES OF PREGNANCY.

BY JAMES W. M'LANE, M.D.,

Professor of Obstetrics in the College of Physicians and Surgeons, New York.

Gentlemen:—In my former lecture I called your attention to the hygienic management of pregnancy, and alluded to the treatment proper to be employed for the nausea and vomiting of pregnancy where it exceeds the physiological limit and interferes with nutrition, and constitutes a disease, and also to certain other disorders. This morning I propose to consider those disorders of pregnancy which are most commonly met with, and which require treatment.

As a preliminary observation, I would say that a pregnant woman may suffer from any disease from which any other woman may suffer, and we might in that sense consider among the disorders of pregnancy the eruptive fevers, the continued fevers, pneumonia, chorea, epilepsy, and so on. These diseases, however, do not spring out of the condition of pregnancy, and therefore, should not properly be styled disorders or diseases of pregnancy. The diseases of pregnancy properly speaking, are those diseases which are dependent upon that condition, and which require the treatment to be directed accordingly.

Diarrhœa is one of those conditions. Some women always have diarrhœa at the time they conceive, and they can fix upon the date of conception by the occurrence of this disorder of the bowels. Other pregnant women suffer from diarrhœa, at each period, corresponding to a menstrual epoch. Others still suffer in a similar way whenever they eat anything but the plainest food. Now, in those cases in which diarrhœa is a symptom of conception and is associated with it, and passes off in the course of a day or two, causing no particular disturbance, it requires no treatment. When it occurs at a time corresponding to each menstrual epoch it should be checked with caution, being an expression of nature to get rid of the plethoric condition which exists at that time, and which is manifested in some by nose bleeding, swelling of the feet, etc. The kind of diarrhœa, however, which necessitates treatment is that which is associated with a good deal of pain in the bowels, with non-digestion of food, with a good deal of straining and tenesmus, thus endangering the life of the ovum, in consequence of the extreme susceptibility of the nervous system and the intimate union between the nervous supply of the intestines and of the uterus. Pain may be transmitted from the one to the other, and consequently, that beginning in the intestine may extend to the uterus. Many women have lost the product of conception in consequence of a diarrhœa. Of course, the irritability of the uterus is not so great at the third or fourth month, as in the later months, when the child has nearly reached its full growth, and changes between the uterine wall and the placenta have begun to take place. It is wonderful how little intestinal disturbance will at this time bring on labor. It is for this reason that many physicians, when, according to their calculations, the time for labor has arrived, always give a laxative (usually of castor oil), which produces a certain amount of pain and a fluid movement of the bowels, this pain, after a while, being

referred from the intestine to the uterus, bringing labor on immediately. I have seen this occur over and over again when patients themselves took a laxative at the time they expected to be confined.

Where diarrhœa occurs some weeks after pregnancy it requires treatment, and the treatment should be conducted with a good deal of caution. In the first place, you want to learn whether there is anything in the intestine which is the exciting cause of the diarrhœa. If so, it would be foolish to try to check the diarrhœa and not remove the cause. A mild aperient should be administered, especially if the tongue be furred, and along with the aperient some antacid remedy. If, however, the cause of irritation be not local but simply nervous, it should be quieted by the use of local sedatives, among which none is better for this purpose than the subnitrate of bismuth, in large doses, together with small doses of morphine. This will allay irritation and stop the diarrhœa. In other cases it is far better to give rhubarb and soda, or a small quantity of mercurial chalk, until a healthy condition of the tongue and mucous membrane of the stomach is obtained, and then by proper diet the patient may be brought to a condition in which no further treatment will be necessary.

Alternating with this diarrhœa, we often meet with another condition which prevails in a far greater proportion of cases, namely, constipation of the bowels. All women suffer more or less from constipation, even when not pregnant, and it is due largely to their own indiscretion, their own fault, and partly to the fault of the mother in not properly bringing them up. A child is very much like a hickory switch; you can bend it in almost any direction, and it can be made to remain in that shape permanently. You can bring a child up to have certain habits, and it will keep those habits throughout life. I feel very strongly upon this point, because I see constantly the ill effects upon the health of women of neglecting to bring on regularly a peristaltic action of the intestine with an evacuation of the bowels. We are all creatures of habit. If we get into the habit of doing a certain thing at certain hours of the day, and do it during a number of days, weeks, and months, at those particular hours, it in time becomes a necessity with us, a part of the requirements of our being, which we cannot do without. Such are the habits which are grafted upon men and women by their course in life. Now, the habit of regularly evacuating one's bowels is acquired by going to stool always at a particular hour. If to-day we have a stool at nine o'clock, to morrow at ten, and the next day at some other hour, and so on, it will make no difference soon whether we have a stool during the course of the day at all. I have never seen a man who did not have regular bowels if he went to stool at a certain time every day. Many women, however, say it is absolutely impossible to have a regular time for this thing; that their household duties, the care of their children, etc., will not allow of it. Now, there is no woman who has not some hour, or half hour, or ten minutes, out of the twenty four hours, which she can command. For instance, she can go to stool the last thing before retiring at night, or the first thing on rising in the morning. But by all means have it regular; else very soon the bowels will become constipated.

There is another cause for constipation in pregnancy, besides that of irregularity. The gravid womb sags in the pelvis, and by mechanical pressure bears upon the bowel, and renders it almost flat. If you have an opportunity to make a post mortem examination upon a pregnant woman, at the seventh or eighth month, I would advise you to look at the bowel, and your wonder will be, not that her bowels moved irregularly, but that they ever moved at all. Everything is crowded, the intestine is compressed, and performs its duty with a great deal of difficulty, and fecal matter accumulates in the colon. Pregnant women who have a regular movement of the bowels every day may still be suffering from constipation, for the movement may be taking place through the central track of the colon, while all around it is blocked up by fecal matter, and, therefore, when labor comes on, you may find the rectum completely plugged up by hardened fæces, which are forced down at this time from above, where they have remained for some time. It is necessary to remove this accumulation of fecal matter from the rectum, else at parturition you will have trouble with it. The small, semi-fluid fecal evacuation which has regularly been taking place, passes through a central canal dug out through the middle of the hard and impacted mass in the colon. If women would avoid this condition, probably they would not suffer from hemorrhoids in the later months of pregnancy, or after childbirth, and thus they would be saved a great deal of trouble.

Treatment.—Constipation is one of the most common conditions which will require treatment during pregnancy, though frequently it exists when the patient will not complain to you about it. First of all, inculcate in every patient the habit of regularity in going to stool, especially

in young females, so that they may grow up into decent habits. Then see that the food taken is such as will produce in the intestinal track a certain amount of mere bulk which tends to stimulate the intestine to contract upon it. That is, do not have the food too fine, otherwise the intestine cannot contract upon it and force it along by peristaltic action. Let some wheaten grits, or Graham flour, or other form of food that will not be entirely digested, be taken along with the finer or more purely nutritious foods, and let the patient eat fruit, especially such fruits as are laxative. I am more in favor of controlling this condition by hygienic means than by medicine, though often medicine is required to bring the intestine into a healthy condition. Different fresh fruits may be taken, according to the season at which they ripen, and in the winter there are dried and canned fruits, such as prunes, figs, etc. If the patient be very dyspeptic, these sweetened fruits may generate gas and give rise to flatulent dyspepsia, but there are other fruits which are laxative, and they should be taken as a part of the daily food.

With reference to medicine, it will probably be necessary for you, in many instances, to coax the intestine to contract upon its contents, especially if the habit of the woman has previously been one of constipation. Of course, there are various medicines which have been employed for overcoming constipation, and some physicians have more confidence in one variety than in another. The mineral waters, such as the Hunyadi and the Apollinaris, are good if they will produce an evacuation when taken in small quantity; but if a patient has to take half a bottle full of Hunyadi in the morning, in order to produce an evacuation of the bowels, other medicines had better be given instead; but if half a wineglassful will produce the desired effect without causing pain, I know of nothing better. There are other women who cannot take these saline laxatives. You should not give a patient citrate of magnesia for the constipation of pregnancy, for it has to be taken in large quantities, and frequently it will not act at all except on the kidneys as a diuretic.

There are other medicines which may be taken in pill form. Now, what you want is not a purgative, but a laxative, and combined with this, something that will stimulate the intestine to its peristaltic function. If you have a proper amount of secretion taking place, and stimulate the muscular fibres to peristaltic action, the masses of fæces in the intestine will be driven along, producing an evacuation of the bowel. You should not give medicines which produce pain or act as purges, such as elaterium or croton oil, for although they would produce a movement of the bowels, they might also excite the uterus to contraction. You wish to employ a mild and efficient remedy, and one of the best is the resin of podophyllum. An eighth of a grain may be given. If you wish to make a pill you may add to it an agent which has a wonderful influence over the muscular part of the intestine, both in women and in children. I refer to belladonna, which, of course, acts in a very different way from the resin of podophyllum. To the pill of resin of podophyllum, one-eighth of a grain, you may add one-eighth of a grain of the alcoholic extract of belladonna. This is a powerful preparation of belladonna, and it assists the action of the may-apple. You may add to this a small quantity of ipecac, which, in small doses, is a tonic to the mucous membrane of the stomach in dyspepsia, and is also a tonic to the intestine. In some cases you will have to add a small quantity of aloes, and here arises the question whether aloes, because of its supposed tendency to produce hemorrhoids, is a dangerous drug to give a pregnant woman. Many women have hemorrhoids who do not take aloes; many who take aloes have hemorrhoids; and many have hemorrhoids and take aloes and get well. Historians tell us that Calvin died of piles brought on by the use of aloes, but as Calvin had many other disorders, it is probable that aloes had very little to do with causing his death. It may be combined with a little soap, and thus makes a very nice laxative. If you wish, you can also add a little of the extract of belladonna, and if thought best, hyoscyamus, and also ipecac.

If the patient is suffering from hemorrhoids and you have to operate upon them, or treat them either before or after labor, I would advise you not to employ aloes. If the anus is perfectly healthy you may give aloes without fear of producing piles; but if the patient have hemorrhoids it is better, as just said, not to give aloes, but give something that will deplete the hemorrhoidal vein. The bitartrate of potassa, with sulphur, has the power of depleting the hemorrhoidal vessels, and hence that is not only my favorite remedy in this particular condition, but it is also that of many physicians. I would give a patient the old-fashioned mixture of sulphur and molasses; or, if she prefers, sulphur and honey, adding to this the bitartrate of potassa. Take of sublime sulphur and bitartrate of potash, each half an ounce, and if you wish to make it more strongly purgative, add half an ounce of

the sulphate of magnesia, mix in molasses, take in sugar and water, one or two teaspoonfuls on retiring at night. If that does not produce a soft, pultaceous stool in the morning she should take an equal dose during the day. The hemorrhoidal mass outside will then all disappear and the patient will not be obliged to undergo an operation at the time of labor in order to relieve distention by congestion of the hemorrhoidal vessels.

Associated with this condition, constipation, we often have dyspeptic disturbances, such as an acid form of dyspepsia, which patients call heartburn. After eating an ordinary meal there rises up in the throat a quantity of watery fluid, a secretion from the stomach, which is intensely acid and is associated with pain at the cardiac end of the stomach; hence the peculiar name heartburn. I should say that five women out of every eight or nine suffer more or less from this difficulty during the latter months of pregnancy, and they are very apt to ask for something which will afford relief. I am in the habit of using for this purpose the subnitrate of bismuth, with soda, adding a little of the oxalate of cerium. The above, possibly with the addition of a little powdered cubebs, will almost surely relieve this distressing symptom. If this does not relieve it, then you may consider that it is due to mechanical pressure on the stomach, which will not be entirely relieved until after the uterus has been emptied of the fœtus.

Many women are bothered by excessive salivation. This does not seem to be due to inflammation of the mouth, stomatitis, or mercurial ptyalism. The accumulation of saliva is so great that the patient is compelled either to spit a great deal or to swallow it. There are cases on record in which the accumulation of saliva was enormous. Montgomery, for example, mentions a patient whom he attended at three confinements, in whom the daily quantity of saliva exceeded pints, and at night a dozen towels would be saturated with the fluid running out of the woman's mouth. You will be called upon to do something to relieve this symptom, although it may be only sufficient to give the woman some annoyance. Old writers on obstetrics, a hundred and two hundred years ago, allude to this as a symptom of pregnancy.

The best thing that you can do for this is not to employ the ordinary remedies recommended as mouth washes, but to use atropia in small quantity. A hundredth of a grain of atropia, taken in the form of a pellet, will usually diminish this secretion materially. Then allow the patient to have some kind of lozenge which is astringent. The best that I know of is a lozenge of krameria. As this is too costly to be used by the poor, I would advise for them a weak solution of tannin as a mouth wash, which will cause this annoying symptom to disappear.

In addition to these minor disturbances, many patients, although they may not have been constipated or had diarrhœa, suffer from hemorrhoids. This is one of the most common ailments connected with pregnancy, and proper treatment is usually very easy and gives the patient complete relief. Not until the uterus begins to press pretty severely upon the veins in this part of the body, do these hemorrhoids give trouble, and then they annoy the patient greatly, first at stool, and during half an hour or more after stool. Then they discharge a little blood, and then, as masses varying in size from a chestnut to an English walnut, they appear outside of the anus. These masses are exceedingly tender and sensitive, and if touched with the finger the patient complains bitterly. I have seen a woman obliged to sit on the edge of a chair a whole month prior to labor, on account of the presence of such a mass, which though not larger than a hickory-nut, was exceedingly tender.

The irritation may be so great as to bring on labor. For the purpose of preventing it I know of nothing else so good as that just mentioned in connection with the constipation of pregnancy, that is, the bitartrate of potash with sulphur, and this should be given in quantity sufficient to produce an unformed movement from the bowel once or twice a day, one which will slide out through the anal aperture without irritating or distending the sphincter muscle, and in that way you can deplete these vessels. Then, if the part be inflamed and tender I am in the habit of applying ice, and I think this is far better than its opposite, heat. Many advise sponges wrung out of very hot water and applied to the part. I have always found that ice, by benumbing the sensibility of the part, is of much more benefit. Nor have I ever seen any ills come from its use, such as uterine contraction. It is best applied in the form of lumps put into an india-rubber bag or a bladder, and retained in position by a bandage. For a moment it is slightly sensitive, but almost instantly the part becomes benumbed, and soon after, when you look at the mass, which before was swollen, congested, and painful, you will find that there is just the difference between it as it was before and as it is now, that there is between a large California grape and a small raisin. The mass is now so much diminished in size that

you can push it back into the bowel with the finger. The next time, however, that the patient has a stool it will come down again, and if it becomes strangulated, it will become painful. Use ice then, to relieve swelling and pain, and if necessary, continue its use after delivery. After delivery it is sometimes necessary to incise the mass and turn out the central part; and until this is done it will not get well; but I have not seen any case in which it was necessary to do this during pregnancy. The best way to avoid hemorrhage is to keep the bowels loose by agents which deplete the hemorrhoidal veins, and use proper diet and apply ice. Something soothing, as opium, may also be required. If the patient be not of a highly sensitive, nervous organization, with the sense of smell unduly developed, I would advise you to employ iodoform, and you can tell by the presence or absence of its strong odor, whether or not the patient has used it. Although it fills the whole house with its odor, if the patient will use it, it will be found to be very efficacious, and can be employed freely. If, however, on opening the box, the patient throws it out of the window on account of its offensive smell, I know of nothing else better than an ointment of galls, which is officinal in the U. S. Pharmacopœia, to which may be added a little opium. By these means you can almost entirely relieve this troublesome condition.

Many patients also suffer during pregnancy from leucorrhœa. This leucorrhœa is simply an exaggerated glandular secretion from the vagina, and when it is only moderate in extent, and does not give rise to irritation of the sensitive nerves at the vulvar outlet, so as to produce pruritus, it needs no other treatment than cleanliness. For the relief of leucorrhœa of this sort, if it be excessive, you will, perhaps, in the early months of pregnancy, on making an examination with the speculum, find on the cervix an ulcerated spot which you can touch with nitrate of silver, as at this time such treatment will not interfere with pregnancy. But in the later months you may find the cervix perfectly healthy and yet the secretion almost profuse, as if the patient had gonorrhœa. It irritates the sensitive nerves, causes pruritus and leads to scratching, and the patient at last has an eczema which is exceedingly troublesome. Ordinary cleanliness and washing out the vagina with a solution of borax will do no harm to the uterus. A syringe should not be passed up into the vagina and a current of hot water injected against the cervix; neither should the injection be carried very high, even if cool water be employed. The tube should be carried only an inch and a half, or two inches up into the vagina, which should gently be washed out once or twice a day with the solution; and at night the patient may need a suppository which contains an astringent, such as tannin, or a pledget of lint, which has been soaked in glycerole or tannin, and if pruritus exists, an opiate may be employed. If, however, this secretion is profuse it will probably not entirely disappear before labor. It is due to pressure on the vessels in that part of the body, which interferes with the circulation and excites increased glandular secretion.

We now pass from these, what might be called minor ailments, but which often cause a great deal of distress, to another disease of pregnancy which frequently calls for treatment, and, too, for energetic treatment, in order to save the life of the patient. I refer to what is known as albuminuria. This is one of the conditions which obtain sometimes during pregnancy, concerning which every physician ought to have some decided convictions. Albuminuria is a name which we give to a group of symptoms, among which is the presence of albumen in the urine. But albumen in the urine does not constitute albuminuria. We see cases which might properly be termed albuminuria, in which, perhaps, there is no albumen in the urine until after the occurrence of convulsions. My own impression is, that the disease is much more common in the city than in the country. Many physicians in the country say they never saw a case of it, while others with a good obstetric practice will say they have seen one or two cases, and those, perhaps, not marked ones. But any man with a considerable obstetrical practice in the city is sure to have cases of albuminuria, during the winter months especially, which will require treatment. This group of symptoms, one of which consists in the presence of albumen in the urine, is termed, as said before, albuminuria, and was first recognized in 1843, although many pregnant women, of course, had had albumen in the urine before that date. In some cases the amount of albumen found in the urine is very small, and does not call for treatment, and disappears with the termination of the pregnancy; in other cases the quantity is more, but still moderate; in others it is quite large, and exists with the gravest symptoms, even in early months, which call for the most prompt and efficient treatment, and which, notwithstanding, frequently take the life of the mother and of the child. It does not do to trifle with the albuminuria of pregnancy, and pass it over, as has been done by some writers, and re-

cent ones, too, by some remarks which would lead one to suppose that it is not an important matter. I look upon it as a matter of the greatest importance which is met with in pregnancy, and I think many women lose their lives by its being neglected until it has reached such a degree that it cannot be subdued. and eclampsia comes in and ends the scene. How many women die in convulsions at labor, and on examining the urine it is found to contain albumen, whereas the condition leading to these results, probably existed for months previously!

Pressure, doubtless, is a cause, at least in some degree, of the appearance of albumen in the urine during pregnancy, and hence its occurrence in the later months; but there must be some other cause than mere pressure, for pressure, as from abdominal tumors, etc., often exists and no albumen exists in the urine at all. Moreover, pressure must exist in some degree in every case, whereas albuminuria occurs exceptionally, and in some cases in which it does not appear, the pressure is evidently greater than in some in which it is present. A partial cause of albuminuria consists in nervous irritation, such as produces an excessive quantity of saliva, or vomiting, or intestinal diarrhœa. But nervous irritation alone is not sufficient to account for it; the chief cause is to be found in the condition of the blood produced by the pregnant state. I have already called your attention to the state of the blood during pregnancy, and I trust you will not forget it, since it is one of the most important facts to bear in mind in the treatment of any affection of pregnancy. You will remember that the child is using the mother's circulation, with which to get rid of its own products of decomposition, that the red blood corpuscles are diminished in number, etc.

The symptoms of albuminuria are sometimes brought on by taking cold. I have known a woman to be apparently perfectly well, to ride out in a carriage, shortly afterwards get her feet wet, during the night be seized with a severe pain in the head, present albumen in the urine, be seized with convulsions, and within two days from the development of the first symptom, die. Although the urine had been examined all along, up to the development of the first symptom, and was found to contain no albumen, I believe that the exciting conditions had previously existed, and required only the cold as a direct exciting cause to bring on albuminuria. So women who are not pregnant may go to crowded theatres and breathe air loaded with carbonic acid, and then eat a late, hearty supper, without bringing on convulsions, whereas, during pregnancy, the state of the blood is such that these improprieties are liable to be the direct exciting cause of convulsions.

One of the earliest symptoms of albuminuria is headache, and when this persists day after day during the pregnant state, it should not go unheeded by the physician; the urine should be examined. If you are to attend a woman who is pregnant, you should have her, if she is a primipara, send you a specimen of urine for examination at the third month, and then after that every fortnight. If a multipara, she need not send it before the fifth month. It is but very little trouble to examine the urine chemically, and if it be found to contain no albumen, it will be unnecessary to examine it microscopically. After the eighth month, the urine should be examined every week. Patients may think they are given unnecessary trouble in complying with this rule, but you must remember that when the symptoms of albuminuria develop, convulsions come on, and so on, the physician is the person who is held responsible, and the question will then be asked, has the urine been examined? I would not consent to attend a woman in labor who refused to comply with this rule.

In an acute attack, as after taking cold, you will find the urine smoky in color, secreted in small quantity, and containing a large quantity of albumen, and there will be considerable rigidity of the abdominal wall. An examination with the microscope may reveal nothing but the presence of hyaline casts.

How do you know the woman has not Bright's disease? First, the previous history. Has she ever shown any of the symptoms of Bright's disease previous to pregnancy? Had she headache, visual disorders, gastric symptoms? Was she nervous and unduly excited or depressed? Had she been growing irritable, so that her ordinary household duties made her perfectly wretched, etc.?

Certain points tell in favor of Bright's disease, while certain other points tell in favor of albuminuria brought on by pregnancy. Those which tell in favor of albuminuria during pregnancy are, a scanty secretion of urine, smoky in color, and containing from ten to twenty per cent. of albumen, being evidence of congestion, and rigidity of the abdominal wall. The points which speak in favor of true renal or Bright's disease are, secretion of a large quantity of urine, of a pale, watery looking appearance, containing a considerable quantity of albumen, with fatty and granular casts, and very little rigidity of the abdominal wall.

In addition to renal symptoms, there will be certain other symptoms in albuminuria, such as headache. The woman will wake up in the morning with a little frontal headache, which, perhaps, will pass off in the course of an hour or two; she will probably be troubled with dreams, and if so, they will be of a terrible, frightful kind. These dreams are significant, especially if they are accompanied by headache. Then there are visual disorders; the patient cannot see so well. I knew a patient who could not see her husband standing at the foot of her bed. They complain of seeing motes, etc., floating in the atmosphere, such as are not there in fact; or, if they close the eyes, they may seem to see persons passing by. One patient told me, that whenever she closed her eyes she saw a procession of soldiers in red uniforms passing by. Another symptom is gastric disturbance. If a woman passes by the period at which she is likely to have gastric disturbance, nausea and vomiting, in the first months, and is then troubled with these symptoms in the morning, such as men have who are suffering from chronic Bright's disease, and with these symptoms there exist others already referred to, you may conclude that it is due to the presence in the blood of irritants which should be gotten rid of by the kidneys, but are not so gotten rid of, because these organs are abnormally busy excreting albumen.

Communications.

LEUCORRHŒA OF PREGNANCY.

BY WILLIAM F. WAUGH, A.M., M.D,

Professor of Materia Medica, etc., in the Medico-Chirurgical College of Philadelphia.

Although leucorrhœa is merely a symptom, and not in itself a disease, it is frequently the principal point upon which our therapeutics are brought to bear. Dependent upon widely different pathological conditions, it may in any case call for treatment to check the flow.

Every physician who treats this class of disease knows how well he is repaid for the systematic investigation of each case; and what light is thus shed upon its treatment. But such an examination is not to be made in unmarried females, unless treatment of rational symptoms fails; and in some other conditions it is contraindicated formally.

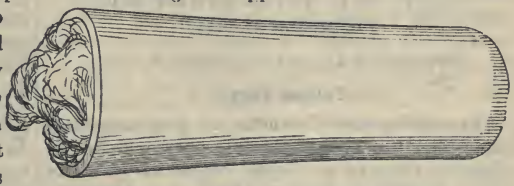
Especially is this true of the leucorrhœa of pregnancy. Here we must lay aside the probe, use the speculum with caution, and may even find the touch difficult if the vagina be abnormally sensitive.

Very often the leucorrhœa is due to gonorrhœa, which is peculiarly apt to be contracted at this period. Catarrh of the cervix is responsible for many cases; and less frequently it is due to relaxation. The ordinary means of treatment are contraindicated. Injections, hot or cold, are unsafe. So, also, are irritant remedies; while the medicated cotton tampon, so valuable at other times, may cause perilous irritation in pregnancy.

The condition of the patient is one of great distress, especially in gonorrhœal cases, where the discharge scalds the vulva and thighs, causing intolerable torment.

To the infant there is the grave danger of ophthalmia neonatorum, from contact with the discharge.

For this condition we have had of late a most valuable therapeutical resource offered to us, in the hollow vaginal suppositories now in the mar-



ket, manufactured by Dr. C. L. Mitchell, Ninth and Race streets, Philadelphia.

The old suppository of cocoa butter has seen its day. It was filthy and inefficient, quickly melting, while it could not be retained anywhere but just within the vaginal sphincter.

The new preparations (of which the above cut represents the exact size) are composed of gelatine and glycerine (variously medicated), cast in a hollow form, and inserted on a pledget of cotton. They melt slowly, thus medicating the vagina much longer than the cocoa butter.

They are light, and can be readily retained in the upper part of the vagina, while the heavier ones would sink.

Until the suppository is melted, the cotton tampon will not irritate the womb; and when it does, it can be at once withdrawn. Their cleanliness is a recommendation with the patients, which is of value.

It is highly probable, as claimed, that absorption takes place more readily than when the medicine is enveloped in an unctuous material. For these reasons, and especially from the length of time the remedy is kept in contact with the mucous membrane, it follows that this is the most effectual method of treating leucorrhœa

and gonorrhœa yet proposed to the medical public.

I have lately treated three cases of leucorrhœa, two of them gonorrhœal, in pregnant women. The formula I prefer is that which bears the name of Dr. Parker, of Plymouth, Mass. Each suppository contained 10 grs. sulpho carbolate of zinc, and ½ gr. sulphate of morphia. In each case the cure was rapid, safe, and permanent. My patients were pleased with the quick relief following the new treatment, and in no case was there any irritation of the uterus. One of the gonorrhœal cases has since finished the pregnancy, and the child has had no ophthalmia. The others have, as yet, had no return of the leucorrhœa.

878 *N. Sixth street.*

Hospital Reports.

UNIVERSITY HOSPITAL.

CLINIC OF D. HAYES AGNEW, M.D.,

Professor of Surgery.

Reported by Louis J. Lautenbach, M.D.

Talipes Varus.

This child, which was before you at our last clinic, has the congenital deformity or defect of club foot, known as varus, talipes varus. The foot is turned in, the heel drawn up. This condition is produced by a loss of power of the extensors of the leg and of the peronei muscles. It is practically a paralysis, these muscles giving way to those situated on the back of the limb.

Such a condition as this must necessarily change the relative articulating surfaces of the bones, and this is followed by a change of the ligamentous connections. The surfaces of the bones are ground off, the edges are rounded, and even the bones and muscles atrophy. Function is interfered with, the movements are restricted, and the weight of the body is supported at a very great disadvantage.

The treatment consists in cutting the tendon of the muscle that holds the foot in the false position. After this is done, we are to keep up a certain amount of manipulation, and sometimes faradism, to prevent the atrophy which is so apt to follow when the muscles are not used.

The peronei muscles are the last to recover. Even when treated in this way they sometimes do not regain their power for two to three years, and then it may occur suddenly; perhaps in a few weeks' time.

Our patient has phimosis, which, while producing many nervous troubles, certainly has nothing to do with club-foot.

The tendo-achillis must be divided subcutaneously. To do this, draw the skin to one side of the tendon, so that after we have cut the tendon and relaxed the skin, the cut in the skin will not correspond to the cut tendon, and thus we have a subcutaneous wound.

Introduce the knife flatwise through the skin behind the tendon, taking care not to wound the posterior tibial artery, which lies in this position; divide the tendon, preferably from below upward, because of the danger which would result to the artery in cutting from above downward, and then by force put the foot in position. Now cover the external wound with a piece of plaster, to prevent the admission of air. On the other foot the same operation is to be performed.

The dressing in cases of this kind is more important than the operation. The treatment now is to keep the foot in its proper position and avoid excoriation. This sometimes fails, as the parts are apt to get sore.

The shoe we use is a modification of the old Scarpa's shoe. It has two movements, both effected by a screw and key. One is to elevate the toe and carry the heel down; the other turns the foot out and retains it in its proper position.

In putting on the apparatus, the heel must rest firmly on the heel of the shoe; if you fail to accomplish this, you fail in your cure. Over the prominence of the great toe we must put a piece of cotton, to prevent pressure. Cotton is also placed above and below the toes. Our patient must keep the shoe on until morning, when it is to be removed and the whole foot rubbed with alcohol until it is in a glow. On the ball of the great toe and at the ankle a piece of lint covered with benzoated oxide of zinc ointment is then to be placed.

If the parts become sore, and there is no necessity that they should, the treatment is apt to fail. It is very important to guard against this condition for the first few days. If the fifth or sixth day be passed without any excoriation, then the treatment will probably be a success.

This shoe extends above the knee. After the shoe is applied, the upper straps, one above the knee, the other at the lower margin of the calf, being buckled, the foot is turned out to its proper position by means of a screw. The toes are now raised, also by means of a screw.

It is sometimes necessary to wear the shoe for two or three years. The time to cease to use it is just that time when the peronei muscles regain their power to contract; but before this time it is not safe to dispense with the apparatus. When, however, the peronei muscles have regained their power, it is to be replaced by a shoe which goes just above the ankle.

Tumor between the Right Breast and Axilla.

The patient, a woman, æt. 24 years, was brought here with the history of a tumor. It is situated on the right side of the right breast, between the breast and the axilla.

The first consideration in the diagnosis is the age, twenty-four years. This eliminates, to a certain degree, the idea of its being malignant. If we speak of a tumor of the mammary gland, or its neighborhood, the inference is that it is a cancer; of course, there are many exceptions to this. When a patient of twenty-four comes to us with a tumor of the breast, we take a favorable view, and are apt to think it not cancer.

This tumor has been growing four years; it is of steady growth; this is important. It is irregular, lobulated; not hard, rather elastic; not

fixed, moves freely. The tendency of malignant growths is to become fixed. The skin can be lifted up from off this tumor; quite important. Carcinoma contracts adhesions to the skin. The tumor slips easily over the muscles, and is not painful; both facts are important, as contrasted with carcinoma.

The average duration of a case of carcinoma in this situation is from two and a half to three years, but there are exceptions to this. This tumor has been growing for four years, and is painless. We can say that it is of a favorable nature for operation, and most probably not malignant. Considered in all its aspects, it is probably an adenoma. We will remove it without touching the breast.

Make a simple incision over the tumor, and it is removed with but one more stroke of the knife. The tumor, from its appearance, is probably but an increase of gland tissue, and when examined microscopically, will probably be found to be an adenoma.

Now, in treating the wound, we do not close it until all bleeding ceases. If necessary, leave it open for fifteen or twenty minutes; but we introduce a silver thread or two while she is still under the influence of ether. Treated in this way, the wound will heal in five or six days.

The great thing in the treatment of a wound is, not to close it until we know positively that all bleeding has ceased. When a wound is so closed it heals very quickly. If we close it, and have a clot ever so small, it undergoes decomposition, followed by the usual lengthy processes of suppuration and healing.

As a dressing, place over the wound lint soaked in carbolized oil, and on this a compress, and on this oakum, which acts as an excellent dressing, being soft, and its odor destroying or masking the odor of the wound. Over this place a broad bandage encircling the chest. To keep the dressing in place, use a T bandage over the right shoulder and around the chest. The arm is then to be fixed across the chest by a sling, and the patient kept perfectly quiet.

Club-foot—Varus, with Bursæ.

This child, somewhat older than our first case, is a subject of the same congenital deformity, but in addition we have bursæ on the outer side of the foot. In consequence of the pressure exerted in walking on the external border of the foot, a condensation of the cellular tissue has been produced, and the formation of a fluid similar to synovial fluid, called bursal fluid. In this case we must treat as in our other case—cut the tendon, elevate the toes, and carry the foot outward.

The father of the child has procured a shoe, but it is not capable of the necessary movements, and, therefore, operative procedure is forbidden until the shoe is rectified.

Nasal Polypi.

This man has suffered with nasal obstruction for twenty five years. The polypi which have been the cause of this have been several times removed, but the obstruction has again returned.

Growths in the interior of the nasal cavity sooner or later produce a deformed nose; it becomes spread and widened, as in this case. The bones, even, by and by, begin to yield. The growth here appears to be a mucous polyp, though this variety does not often cause much deformity.

People who suffer from catarrhal conditions often have growths of this nature. Several mucous glands begin to grow and enlarge, and at length become confluent.

The only thing to do here is to remove them. To-day they will be found to be swollen, due to the moist state of the atmosphere. The mechanism of removing them is by means of a polypus forceps passed into the nostril and catching the growth.

In detaching them, I find here a great deal of resistance due to the fibrous element. Putting the finger behind the palate, some polypi are felt projecting, and I have now, by means of the forceps removed quite a large one which was projecting into the pharynx.

Necrosis on Left Side of the Inferior Maxillary.

This man, who has been etherized, suffers from the effect of the eruption of a wisdom tooth. It is quite apt to cause trouble. The eruption occurs often late in life, when it is apt to result in an abscess, sometimes necrosis. Here it has caused necrosis of the lower jaw, and on introducing the probe through one of the abscess openings the extremity comes in contact with bone, not only dead, but also loose. By extracting the loose pieces we can probably cause the openings to heal up.

The rule in all cases of necrosis of this, as well as of all other bones, is to wait until the sequestrum or dead bone has separated from the living. If you tear it away too quickly, necrosis occurs in the bone from which the piece is torn away.

Looking at this man's left cheek we see two sinuses. Passing in a probe at one of these openings and bringing it out at the other, we cut through all the intervening tissue. Then inserting our forceps, we remove all such pieces of bone which lie loose. Three pieces are all that are loose in this case. All that is now necessary is to simply dress the wound as we would an ordinary open wound.

ST. MARY'S HOSPITAL, PHILADELPHIA.
EYE AND EAR DEPARTMENT.

SERVICE OF H. AUGUSTUS WILSON, M.D,

Surgeon in Charge.

Reported by GEO. F. SOUWERS, M.D.

A Case of Traumatic Ophthalmitis—Enucleation.

We have for consideration to-day the case of J. B., aged 54 years, a steel worker. He represents a type of eye troubles and accidents which the ophthalmic surgeon is continually called upon to treat, and which, if not treated early, promptly, and decisively, terminate in the most disastrous and lamentable results. No consideration should ever induce you to slightingly look over, or manage a case negligently, presenting a history such as is shown by this individual. Such cases as that of this patient all present the same history, differing, perhaps

in a few minor particulars of time, place and incident, but nevertheless. otherwise alike. This person, for instance, tells us that four weeks ago, while engaged in the pursuit of his business, a steel chipping, half an inch in length and three-eighths of an inch in breadth, was forcibly propelled against his right eye. From the phenomena which succeeded. the foreign body undoubtedly impinged upon the cornea. and upon examination, we find this to be the case, for in the upper quadrant of this watch crystal of the eye there is present an oblong cicatrix, its longitudinal axis being vertical. Now, had the force of the blow expended itself at this point, we probably should not have had any further manifestation of the injury than a lacerated wound of the cornea. A greater or less degree of inflammation might have taken place, but this doubtless would have expended its force locally, and not involved surrounding structures in such unfortunate results as we have here to deal with. On examining further, we find that the pupil presents not the rounded appearance that naturally characterizes it, but that it corresponds in shape to the wound in the cornea, vertically oblong, showing thus that some abnormal change has taken place in it. There can be no question as to what this appearance is due to; the force of the missile has wounded the iris and ciliary body, has lighted up an inflammation, which, being left to pursue its own course, has resulted in an inflammatory adhesion of a portion of the iris in the lips of the corneal wound, and there is no force short of absolute rupture of the membrane that can tear it from its new position; earlier in the case atropine would doubtless have exerted its beneficial influence; and though, to-day, even, it might produce more or less stretching and attenuation of the membrane, yet no practical good would result, for the trouble is not so much in the iris as in the ciliary body; a wound of the iris alone might not involve an eye in such profound disturbance and disorganization as we have here to deal with. Upon looking more deeply into the eye we see a cataractous lens. being produced by inflammation communicated from the ciliary body by contiguity of structure.

Coming back to the external portion of this eye, for we cannot examine further back, owing to the condition of the lens just spoken of. we find that the conjunctiva and subconjunctival tissues are deeply injected, lachrymation is excessive, and on pressure the ball is found to be exquisitely sensitive. He tells us that since last Saturday, it being now Thursday, he has suffered unutterable torments, and that he has not been able to gain a moment's sleep, owing to the great pain in the organ.

Now, to what do these indications point? I answer, to but one thing, namely, inflammation of the ciliary body, primarily, and the production of general ophthalmitis of the right eye, with threatened destruction of the uninjured eye. Already there is some supra-orbital pain, slight photophobia, and slightly increased lachrymation of the left eye. Its pupil acts sluggishly, and though this does not of necessity indicate a commencing trouble, yet I should be disposed to narrowly watch such an eye, and to place it under the influence of proper medication. In all cases of traumatism to an eye, with resulting loss of vision, the great danger is a sympathetic involvement of the companion organ; the period of this involvement may be longer or shorter, extending from a few weeks to a number of years. In six cases that I have operated upon, sympathetic ophthalmitis manifested itself in six months, nine and twelve years, and in one case, after thirty-one years had elapsed. Now, this danger does not threaten all eyes alike that have been traumatically blinded; if the foreign body find lodgment in the lens and goes no further, blindness results, it is true, from the production of traumatic cataract, but if the ciliary body and the structures posterior to the lens are not involved, the foreign body may rest in its bed in the lens and give no further trouble. When, however, there is the slightest involvement of the structures beyond the lens, there is a constant threat held over the uninjured eye; sooner or later it sympathizes with its injured fellow and unless promptly treated, incurable blindness is the result. Great care must be exercised where cases of traumatic cataract are operated upon. to remove with the lens the irritating foreign body, for otherwise the operation will do more harm than good, and the event sought to be avoided, will be precipitated. The causes operating in the injured eye to produce traumatic blindness are relapsing iridochoroiditis, retinitis, and irido cyclitis. These conditions may, of course, be accompanied by certain attendants, such as intraocular hemorrhage, etc. The question may arise as to how we shall know when the ciliary body has become involved in the injury produced by the foreign body. While perhaps at the time of the accident there is no absolutely reliable symptom as to what has taken place, yet later, the injury may be assumed, if, pressure being made at the upper portion of the ball, pain is experienced. This however, is not a pathognomonic symptom. for it may, indeed, be a sign of some other eye disease; still, if taken in connection with the history of the case, and the seat of injury, it may serve as a means of arriving at a diagnosis. Now before proceeding further, let us pause for a moment to discuss what shall be done in recent cases of foreign bodies that have found entrance into the eye. So long as a useful degree of vision remains, with no complications either of the injured or sound eye, a conservative course must be pursued. The foreign body should be removed if it can be done without doing further damage. If the body is lodged in the cornea, and difficulty is experienced in securing its removal by means of the insufficient size of the opening made by the body, it is a perfectly justifiable proceeding to enlarge the opening to a convenient size, care being taken that the substance be not allowed to drop into the anterior chamber. this being prevented by counter pressure made by means of a delicate needle introduced through the cornea. No gouging of the tissues should be indulged in, in fruitless endeavors to secure the body. One had better desist, than by his manipulations to precipitate violent inflammation. Where the body is very minute, the patient had better be anæsthetized, in order that the operator may be better able to manipulate the eye and govern its motions without experiencing resistance from the patient's

movements. In cases where minute, almost invisible particles of steel and iron constitute the impinging body, it has been suggested that a small magnet be employed to facilitate the removal. When, however, the invading body has penetrated so deeply into the eye as to seriously compromise the acuity of vision, but one step should be taken, and that is the total extirpation of the globe; optico-ciliary neurotomy we shall discuss later. This course should be followed in order to guarantee immunity from danger to the sound eye, and should not be deferred till symptoms of sympathetic ophthalmia make their entrée. The position assumed by the surgeon in the removal of foreign bodies is of importance. He should stand so as to get the most direct and best possible light on the eye. The patient being seated upon a chair in front of such a light, the operator stands behind him, and throwing the head of the patient slightly back, holds the lids out of the way by means of his left hand, or by the stop speculum, the employment of this latter instrument allowing the free use of both hands; a sharp-pointed needle may then be employed to make the removal. If the body do not destroy sight, and if allowed to remain in situ, as before spoken of, a narrow inspection of the eyes must ever afterwards be maintained, in order to nip in the bud any inflammatory symptom, local or sympathetic, that may arise. It is not only eye symptoms that point to the ushering in of sympathetic complications; not they alone which show that the fires of inflammation have again been lighted up, which, unless checked, will go on to produce most dire results. Curious neuralgias, acute dyspeptic and vomiting spells, together with various disturbances of the alimentary tract, not unfrequently, if traced to their source, will be found to owe their origin to a sympathy with an eye about to explode in an ophthalmitis. Indistinct vision is laid down by Mackenzie, as about the first symptom that marks the advent of ophthalmitis in the sound eye, this symptom making its appearance generally in from four to six weeks from the date of the original injury, though it may not transpire for many years. Then pericorneal injection and adhesive iritis follow closely, the pupil becoming, if not closed, very greatly contracted, the vitreous is clouded as well as the cornea, then opacity of the lens follows. These symptoms are accompanied by more or less photophobia; the tension of the eyeball, increased at first, gradually diminishes, and the eye undergoes atrophic changes. Now while this condition is generally the result of the presence of foreign bodies in one eye, yet the condition may be produced by severe blows, and it may even follow the operation for the extraction of cataract. Again Mackenzie has shown that it is not essential that total blindness shall be present in one eye before a sympathetic ophthalmia shall take place in the other. As to what measures of relief should be pursued, I think, after a study of the subject, and a careful weighing of the experience of the profession, that enucleation of the injured eye is the proper treatment to be pursued, for while optico-ciliary neurotomy undoubtedly presents the advantages of preserving a natural tissue in relationship with tissues, of a better cosmetic effect than can be obtained by an artificial eye, yet we well know that nerves having had section made of them, even when pieces had been removed, have a tendency to reunite; in fact, even when the ends have been turned back from each other they have united. If, as is now held, the disease be propagated by means of the ciliary nerves, then when this reunion takes place, we have the same old threat held over the patient's eyes, although Schœler does not admit that this latter portion of the proposition is tenable. I know of at least two cases, where enucleation was necessary after optico-ciliary neurotomy.

Dr. Wm. Thomson beleives that in those cases where division of the optic and ciliary nerves has been performed, good results are obtained by sewing forward the orbital portion of the external rectus muscle to the conjunctiva at the corneal edge, instead of to the tendon, the bulbous extremity of the nerves being thus displaced inwards. I think, however, that the old operation of enucleation is preferable. This is performed by dissecting the conjunctiva up from around the corneal margin; the muscles are then cut off separately close to the eyeball, a pair of scissors passed back deeply into the orbit, and section made of the structures entering the fundus of the eye. The ball being taken out, the conjunctiva and tendons are brought to a point and stitched together in order to make a good stump for an artificial eye; compression is then made on the orbit, by means of cotton wadding or linen cloths kept wet with cold water, and a monocular bandage applied over all. Hemorrhage is not to be feared. It unfortunately happens at times that an artificial eye on this stump sometimes lights up a sympathetic ophthalmia, from the fact that a portion of the cornea or the ciliary nerves may be retained in it; but this is a rare occurrence. As to the time for the operation, I think the best authorities unite in urging its early performance; if sympathetic inflammation has made its debut in the sound eye, the chances are that little benefit will result; still, even then, the patient should be given a chance, for the removal of the source of irritation may, perhaps, suffice to stop the mischief threatened. Unfortunately patients are too often urged to wait, Micawber-like, for something to turn up, and when, alas, that something does turn up, it is too late to prevent total blindness. The performance of an iridectomy is a perfectly useless measure, and is not to be considered in connection with this disease,

Note, ten days later.—An interesting feature in this case was the ecchymosis which followed in the sound eyelids, and was possibly due to vomiting from ether, beginning on the fourth day after the operation. It began on a spot corresponding with point of origin in the right lids, and spread around and resembled accurately the ecchymosis in the lids of the eye operated upon. No further involvement has taken place. The patient has suffered no pain, and but slight inconvenience; the vision in the remaining eye is normal. He was discharged from the house with instructions to return in one week's time, when we will begin the process of hardening the stump preparatory to inserting an artificial eye. I rarely allow the introduction of an artificial eye until one month has elapsed from time of operation.

Editorial Department.

Periscope.

An Endemic of Paraplegia Among Chinese Coolies.

Dr. H. N. Vineberg, of Waiohina, Sandwich Islands, reports, in the *Canada Medical and Surgical Journal*, for November. 1881, the appearance of a peculiar disease among the Chinese laborers on the several sugar plantations on the islands. Of about three hundred coolies employed on the plantations which Dr. V. attends, fully seventy-five have been attacked. The disease often sets in suddenly, the Chinamen dropping down in the field unable to stand. Sometimes the patient's walk is not unlike that of locomotor ataxia when the ataxic muscles are beginning to show signs of motor paralysis. The leg and foot are raised high, brought forward slowly and apparently with an effort, and the whole length of the sole touches the floor at once in completing the step. He walks with his legs wide apart. The muscles feel firm to the touch, and on being tightly grasped by the hand the patient calls out with pain. Tactile sensibility is not impaired, and reflex power is normal. Pain is first referred to the region of the knees and afterwards vaguely to the thighs and legs, but most frequently to the calves only. No pain whatever is referred to the spine, and hard knocks with the knuckles over the spines of the vertebræ elicit no cry of pain. Power over the sphincters of the rectum and bladder is retained to almost the very last. The bowels are usually costive; the appetite is good, and the tongue may be clean or slightly furred. The pulse is frequently from 90 to 110 per minute, and is rather small and compressible. The urine is clear, moderate in amount, and free from albumen. The case may terminate in one of three ways: death, recovery, or pass into a chronic state. In most of the cases ending in death, the paralysis rapidly extends upward, invading the whole muscular frame, the muscles quickly atrophy, and the patient dies asphyxiated, from paralysis of the respiratory apparatus. About 30 per cent. came under this head, and in the greatest number of cases it took place between the third and fourth week. Owing to the superstitions of the Chinese about the dead, the doctor has only been able to hold one *post-mortem*. In that case the lungs, liver, kidneys, spleen, stomach and bowels appeared normal. The mitral valves were thin and small, but showed no signs of inflammatory changes.

Recovery takes place at a variable period, but most often in from three to four weeks, and is liable to be interrupted by several relapses, each of which last from three to four days.

As regards the etiology of this disease the author thinks "Chinese habits," masturbation, etc., with overcrowding and want of proper ventilation, act as predisposing causes. He also states that the diet of coolies consists of rice, peanut oil, bad pork, and semi-putrid sausages. It is more than probable that the putrid meat is the chief cause, as it has been known to produce similar disturbances in Europeans. Moreover, on one plantation, where beef rations were given fresh from the commissariat, no case had occurred. But some time after, while one of the directors was on a visit to the plantation, the Chinese laborers petitioned him to have their beef rations exchanged for its value in money, which was granted to them. They began to indulge freely in their favorite dish, putrid sausages and peanut oil, and in less than three weeks from that date there were no less than thirty cases on that plantation. Again, as soon as the money system was put a stop to and vegetables added to the rations, we had no fresh cases. Connected with the plantations are several small planters who plant corn on shares. They also employ chiefly Chinese coolies, who as a rule have always some vegetables which they grow themselves, and they got their rice and beef served out to them by the planters themselves. None of the planters' coolies have been affected by the disease.

The treatment employed consisted in a generous diet, with vegetables—particularly cabbage; better ventilated and roomy quarters, and stimulants in those cases with a feeble circulation. Stimulating liniments to be well rubbed into the paralyzed limbs, and where the paralysis showed no signs of extending, strychnia and electricity. It is no more than just to say that where this course of treatment was followed out, even if only in part, there the percentage of the cases of recovery was the highest.

On the Complications of Leprosy.

Among the more important complications of leprosy, according to Dr. Henry Dickson Bruns, of New Orleans, in his valuable paper entitled "A Clinical Study of Leprosy," published in the *Archives of Medicine*, for 1881, are bronchitis, indigestion and diarrhœa, which, the author says, are indeed so common that they may rather be styled accompaniments than complications of the disease. The bronchitis of chronic and persistent type is due to congestion, or to the breaking down of tubercles in the mucous membranes of the tubes. The colliquative diarrhœa may be the product of the same causes, or result, as does the indigestion, from the vitiated condition of the blood and the depression of the general health.

Albuminuria is probably, in the majority of cases, due to the invasion of the kidney by the morbid process.

Leprosy predisposes to other affections of the skin. Eczema, elephantiasis Arabum (in countries where it is endemic), herpes zona, impetigo, lichen, molluscum fibrosum, pityriasis, and scabies are all on record as complications. These are worthy of note, for they may, by modifying the appearance of the disease, obscure the diagnosis. Especially is this true of scabies. Indeed, the peculiar changes produced by the presence of the acarus in a leprous skin, led several excellent observers to mistake the nature of this complication, and to declare it an eruption peculiar to leprosy, or, at least—a later opinion—a form of itch found under no other circumstances.

Owing to the state of the skin, the parasite thrives exceedingly well, and small lumps, consisting of masses of thickened epidermis, and countless numbers of the dead insects, are seen upon the hands and other portions of the body.

This disease does not protect against the exanthemata. Cases of variola and varicella have occurred in the persons of lepers in the hospitals at Bergen. Dr. Kaposi quotes from Lawrence (*Jour. Cut. Med.*, vol. I, No. 2, 1867) a case in which measles supervened during the progress of tubercular leprosy. Dr. J. H. Bemiss also gives us to understand that smallpox attacks lepers, and that vaccine matter readily "takes" on them.

Syphilis is only too often found as a coexisting plague in Norway, Sweden, the Hawaiian Islands, and other countries.

Lepers are said to be very susceptible to the influence of cold, and improper food, which renders them especially liable to phthisis, erysipelas and nephritis.

According to Dr. Enders, leprosy in women is usually kept in abeyance so long as menstruation is regularly performed, but the least disturbance of this function may precipitate or aggravate, should it already exist, the disease. This, however, is a *post hoc propter hoc* argument, and it appears to me more than possible that the disturbance of menstruation is rather, as in tuberculosis, an early signal of the approach of a grave constitutional disease.

Lastly, hepatic disorders may arise, in hot climates, toward the end of an attack.

Aspiration of the Bowels in Peritonitis.

A successful instance of this measure is reported by Dr. D M. Williams, in the Dublin *Journal of Medical Science*. The patient was a boy of thirteen. We quote the most interesting part of the history:—

His condition was now alarming; the pulse was, for the first time, irregular and compressible—144 to the minute; breathing very shallow; eyes sunken; cheeks hollow; tongue dry; constantly moaning with pain—evidently dying. He placed his hand on the epigastrium, and said the pain was smothering him, no doubt from pressure upward of the diaphragm interfering with the action of heart and lungs. The abdomen was arched from the xiphoid appendix to pubes, the least attempt at percussion causing great agony. Had not passed water since the 7th. I determined to aspirate him, and passed the finest needle into the transverse colon, and on turning the tap a great quantity of flatus rushed through, followed by three ounces of fluid fæces, which gave him great relief, but did not perceptibly diminish the size of the abdomen. Fearing the needle was blocked, I withdrew it, and found such was not the case. I had evidently emptied this portion of the colon. Having washed the needle, I pierced the ascending colon; another rush of flatus took place, followed by eight ounces of fæces. I repeated the operation on the descending colon, with the same result. There was now very decided diminution of distention and relief of pain: still he complained bitterly of a spot just below the navel, which was quite tympanitic. Taking care to avoid the bladder, I pierced probably the ileum; more flatus escaped, with about half an ounce of fluid fæces. He was now much relieved; pulse had fallen to 96; breathed deeper. 10 P.M. Much the same as after the tapping; expression of face less haggard; pulse 120, full and soft: temperature 102°; passed water freely, and without pain, an hour after the tapping. To take pulv. Doveri, gr. 10, h. s. From this time his progress toward recovery was steady.

Antiseptic Treatment of Abscess.

Dr. Lucas Championnière recommends, in the *Union Médicale*, the following procedure:—

Before opening an abscess, in whatever region it may be placed, we should carefully wash the skin, especially if it has been covered by a poultice, with a strong carbolic acid solution:—

R. Acidi carbolici,	50	parts
Glycerini,	75	"
Aquæ,	1000	" M.

The bistoury should also be dipped in the solution. The contents of the abscess are to be discharged, and some of the above solution injected, care being taken that the injected liquid has a free issue. The end of a caoutchouc tube is introduced into the wound, having a thread attached to it to facilitate its removal, and it is then covered by a thick layer of charpie, impregnated with a solution of carbolic acid twenty-five parts, glycerine twenty-five parts, and water one thousand parts. Finally, over all is laid a layer of gummed silk. At the end of twenty-four hours the tube is removed in order that it may be cleansed and shortened, when it is again covered with the charpie, moistened with the weaker solution. Under this treatment the amount of suppuration is diminished, the redness of the wound becomes insignificant, and the cicatrices which result are much less apparent. Dr. Lucas recommends this procedure especially in abscess of the breast.

How to Use the Bromides.

In an article on the above subject, which appeared in the *Journal of Nervous and Mental Disease*, for July, 1881, Dr. Geo. M. Beard, who, as we all know, is an advocate of heroic (30 to 100 grains or more) doses of this drug, says:

In epilepsy, the necessity of giving doses of considerable size is recognized more and more; but it is not generally allowed, even by neurologists, that in neurasthenia or hysteria doses of even greater size are admissible, proper, and necessary, if we would get the results we seek.

In many cases a single large dose of bromide, say one hundred or one hundred and twenty grains, or even a larger amount, given in a tumbler of water, may be sufficient of itself, without any repetition, in any quantity, to break up an attack of hysteria, or sick headache, or sea-sickness; whereas, the same case in the same condition, treated by divided doses of the same remedy, might not be affected at all.

It sometimes seems to be necessary to overwhelm the nervous system with the sedative effects of the bromide, in order to get bromization.

Although no fatal cases have occurred from these immense doses, dangerous symptoms have been produced by a single dose of one hundred grains. Patients taking bromides should, therefore, be closely watched, and if the medicine has to be continued for any length of time, it should be alternated or combined with tonics, as nux vomica, or, in some cases, ingluvin and arsenic in small doses, to act on the stomach.

Hints for the Diagnosis of Ovarian Tumors.

Dr. A. Macdonald gives the following hints in the Edinburgh *Medical Journal* for November:—

1. *Pregnancy.*—The possibility of pregnancy, the signs and symptoms of pregnancy, and waiting if in doubt, place the diagnosis beyond possible mistake, with a fair measure of care.

2. *Fibroid.*—A large fibroid with solid walls, leading to general enlargement of the uterus, is easily diagnosed. The increased length which the sound enters, the fact that the uterus moves with the sound, the peculiar feel of the uterus, and the nearly constant menorrhagia, suffice to keep the diagnosis correct. It is quite common to hear a bruit in a case of uterine fibroid; only in vascular sarcomata is such audible if the tumor is ovarian. But much greater difficulty is experienced in cases of fibro-cystic tumors connected to the uterus, with or without pedicle. In that case we must try to ascertain whether the tumor is connected or disconnected with the uterus. Then the cyst of a fibro-cystic tumor may be tapped, when we expect to find only a thin fluid of great density, with some blood-corpuscles, and possibly some non-striped muscular fibres. But in those cases it is often found that only an exploratory incision can determine the diagnosis with accuracy.

3. *Renal Cysts* begin below the false ribs and extend downward and forward. They have a line of resonance between them and the liver, due to the transverse colon, which is of value, as showing they are not of hepatic origin, and when aspirated they contain urea. Usually accompanying such there are urinary symptoms, but not always.

4. *Ascites* exhibits the characters of free motion of fluid in an imperfectly filled cavity. Accordingly, when the patient lies on her back the abdomen is flattened anteriorly, the flanks give a dull note, and there is clearness round and above the umbilicus. With change of the patient's position the areas of resonance alter. Thus, if the patient is turned on her left side, the right flank gives a clear note, and *vice versa*. In case of tapping an ascites the thick gelatinous fluid characteristic of ovarian tumor is never obtained.

5. *Hydatid Cyst of the Liver.*—In this case the tumor grows from the liver, distending first the distance between the ensiform cartilage and the umbilicus, the reverse of an ovarian cyst. Again, tapping and discovering acephalocysts in the fluid is convincing evidence of the true nature of the tumor.

6. *Hysterical Abdominal Distention*, commonly known as spurious pregnancy, need deceive no one, as the percussion is uniformly resonant, and the tumor disappears under chloroform.

The Efficacy of Croton-Chloral Hydrate.

It is so long since we saw anything written about this drug that we had almost forgotten its existence. We, therefore, reproduce here the following communication from Dr. Chas. James Fox, of Willimantic, Conn., to the *Medical Bulletin* for December, 1881:—

For some time past I have used, with special efficacy, croton-chloral hydrate in nearly all the cases which have recently come under my observation, of facial neuralgia (some seventeen in all), and my experience in successfully treating the affection by means of the drug have led me to give the results of my observation to the profession. I generally prescribe a full one in this class of cases:—

℞. Croton chloral hydrate, ℥ij
Glycerine, ℥ij
Aqua fontana, q. s. ℥iv. M.
Fiat solutio.
Sig.—Ter in die.

In ordinary cases I give a teaspoonful three times a day. If the symptoms are quite urgent, I give a teaspoonful every two hours, until the pain is relieved. In hysteria, especially when convulsions come on, it is specially valuable. My opinion is that the drug, in small doses, produces, first, a næsthesia of the head before the rest of the body is affected. In large doses, the hypnotic effect is marvelous. Suffice it to say, its beneficial value is to be seen in all painful affections of the head, in just such cases. I have observed its efficacy as a therapeutic and remedial agent. Permit me to add, its primary action is clearly marked in producing anæsthesia of the head, and only after this does its influence extend to the organs of the body. Finally, its true value can only be weighed, not by individual experience, but by the general verdict of the profession.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——"Nihilism in Medicine," is the subject of an address delivered before the N. H. Medical Society, June 21, 1881, by Dr. D. W. Jones, of Portsmouth. It comes to us in a reprint from the Society Transactions.

——In a reprint from the New York *Medical Journal and Obstetrical Review*, for November, 1881, Dr. James S. Green gives the history of a case of chronic club-foot successfully treated without tenotomy, by continuous extension and stretching.

——*Godey's Lady's Book* for January, 1882, contains, besides the latest fashions, a large amount of interesting reading matter, a beautiful song, with music, entitled "Birds in the Night," and a fine engraving representing Quentin Durward supporting the Countess Isabelle across the Courts of the Castle of Schonwaldt.

BOOK NOTICES.

Die Krankheiten des Ohres und deren Behandlung. Von Dr. Arthur Hartmann, Aurist, of Berlin. Mit 34 Holzschnitten. Kassel: Verlag. von Theodor Fischer. 1881.

The Diseases of the Ears and their Treatment. By Dr. Arthur Hartmann. 8vo, with 24 illustrations. pp. 212.

This volume has, according to the author, been written for the medical profession at large, not for the specialist, and contains a well digested statement of the diagnosis, prognosis and treatment of diseases of the ear, with the most recent and positive views, avoiding all uncertain and doubtful matters that are still sub judice. The author of this work is well known as one of the youngest of the prominent writers on the subject of diseases of the ear, and yet he has written a number of valuable monographs on various interesting subjects pertaining to this special department of medicine.

The work is evidently intended as a convenient handbook for the medical student, from which he can, at a glance, obtain the most recent modes of treatment freed from all matters of controversy, which, as a rule, take up much valuable space in the works of some of the older German writers. In the preparation of the work our author has availed himself chiefly of the labors of his countrymen, "V. Tröltsch," "Politzer," "Urbantschitsch;" but very few of the English, American, or French writers are even referred to. We are, however, pleased with the work, and give Dr. Hartmann credit for the care and space which he has devoted to the therapeutic portion of the subject, which is usually made subordinate to the other departments.

The introductory seven pages are devoted to an historical account of the ear and its diseases, and is very pleasant reading, giving, as it does, the early rise and progress, and some of the very odd remedies employed for deafness, etc., concluding with full credit to "Itard and Deleau, of France," Wilde and Toynbee, of England, and Lincke and Kramer, of Germany, as the true pioneers in the scientific knowledge and treatment of the diseases of this portion of the human body.

"The recent recognition of the common ground occupied by aural therapeutists and medical practitioners widens the field of otology, and brings the principles of our practice strictly within the domain of general surgery, and relieves them from the ignorant imputations of those misnamed *general surgeons* whose sneers at otology, as a purely empirical department of surgical art, had to be borne with while the etiology and pathology of the obscure affections of this intricate organ were being unraveled by the pioneers in otological science.

"Thanks to the genius and labors of such men as Politzer, Lucca, Gruber, Weber-Liél, Voltolini, Lowenberg, Schwartze, Mayer, and many others on the continent, to Hinton, Cassells, Jones, Woakes and Dalby, of England, and such workers as Turnbull, Burnett, Roosa and Green in the United States, otology has emerged, and can bear, equally with its sister sciences, laryngology and ophthalmology, the light of criticism."*

But to resume the further examination of the work before us, we find chapters first, second, and third, are devoted to the Diagnosis, Symptomatology and Therapeutics, of the Ear. While chapters four, five, six, seven, eight, nine, and ten enter into the consideration of the diseases of the auricle and meatus. Then follow in order the membrana tympani, middle ear, nervous apparatus, and internal ear, concluding with traumatic affections and deaf-muteism; this latter affection being briefly treated, as our author has written a full and comprehensive treatise on this obscure and important subject. The printing of the work is beautiful and clear, and in the Roman type, while the wood cuts, binding, etc., are highly creditable to the publishers.

The Opium Habit and Alcoholism. A Treatise on the Habits of Opium and its Compounds; Alcohol; Chloral Hydrate; Chloroform; Bromide of Potassium and Cannabis Indica: Including their therapeutic indications, with suggestions for treating various painful complications. By Dr. Fred. Herman Hubbard. A. S. Barnes & Co., 111 and 113 William Street, New York. Cloth. 8vo. pp. 259.

After a somewhat sensational depiction of the "rare and pleasing sights" passing before the "waking dreamer," whose mind, inspired by opium, is being "gently carried through fairy lands," enjoying sensations which in their "voluptuous delights" surpass all others, as well as of the "horrible sufferings endured by the confirmed opium eater," the author gives the history of a number of cases, more entertaining than instructive, illustrative of his method of treatment, which consists in the gradual withdrawal of the morphia and the substitution of extract of cannabis indica until the *crisis* comes, over which the patient is carried by means of tonics and baths. He relates a case of opium habit ac-

* Zymosis in Relation to Aural Therapeutics, *Specialist*, Nov. 1881.

quired *in utero*, which came under his care when the child was twenty-six hours old. He began treatment by administering three drachms of paregoric daily, gradually reducing the dose until a cure was effected. We certainly fail to see the wisdom of selecting an alcoholic preparation containing so minute a quantity of opium, unless alcohol was especially indicated. In treating dipsomania, alcoholic preparations of cinchona rubra, cannabis indica, capsicum and ginger, form the chief ingredients of his prescriptions. He also recommends, as an infallible remedy, the thorough seasoning of all foods with a mixture composed of two ounces of whisky, one ounce each of sherry, port, lager beer, cider and champagne, two drachms of gin and one of rum. The chloroform habit, says he, is usually acquired by its use in labor. To remove the necessity of anæsthetics in the lying-in room, he recommends that pregnant women should avoid all foods containing bone-forming elements, in order to starve the fœtus and render its framework yielding and pliable. We have said enough to show the general character of this work. While confined to the professional reader its teachings can do no harm; to the general public they would not only be misleading, but even dangerous. The printing is exceedingly bad and the orthography worse.

A System of Surgery, Theoretical and Practical. In Treatises by Various Authors. Edited by T. Holmes, M.A., Cantab., Surgeon and Lecturer on Surgery at St. George's Hospital, etc., etc. First American from Second English Edition, thoroughly Revised and much Enlarged. By John H. Packard, A.M., M.D., Surgeon to the Episcopal and St. Joseph's Hospital, Philadelphia. Assisted by a large corps of the most eminent American surgeons. In three volumes, with many illustrations. Vol. II, Diseases of Organs of Special Sense; Diseases of Circulatory System; Diseases of Digestive Tract; Diseases of Genito-Urinary Organs. Philadelphia: Henry C. Lea's Son & Co.: 1881. 8vo, pp. 1063.

This volume is divided into four parts, as indicated in the title page. Nineteen subjects are treated of, some of them very exhaustively. Thus one hundred and seventy-one pages are devoted to diseases of the eye, and the subject illustrated with numerous wood cuts and three beautifully colored chromo-lithographic plates. Diseases of the other organs of special sense likewise receive more attention than is usual in works on surgery. Part II, on diseases of the circulatory system, is especially interesting, on account of the fullness with which aneurisms are treated of, the methods devised for their cure described and reference to numerous cases given. Parts III and IV, which treat of diseases of the digestive tract and of the genito-urinary organs respectively, are very fair representations of our knowledge at the present day. In other respects—the mechanical execution of the work, illustrations, etc.—what we said of the first volume applies equally to this.

The Nurse and Mother; a Manual for the Guidance of Monthly Nurses and Mothers; comprising Instructions in regard to Pregnancy and Preparation for Childbirth, with Minute Directions as to Care during Confinement, and for the Management and Feeding of Infants. By Walter Coles, M.D., Consulting Physician to St. Ann's Lying-in Asylum, St. Louis, Mo. J. H. Chambers & Co., Chicago, Ill., St. Louis, Mo., Atlanta, Ga., 1881. Cloth, 8vo, pp. 153.

The author's chief object in preparing this little manual has been to elevate the nurse above the old superstitions of the lying-in room, by imparting to her satisfactory information concerning all that is necessary for her to know and to do in her capacity as such. The "old and experienced" nurse who has not received the proper training is certainly the most unfit and useless person in a lying-in room, and we sincerely hope that this book will be carefully studied by those who intend to fit themselves for this important calling. They would then understand the proper relations between nurse, patient and physician, and have a sufficient knowledge of pregnancy and labor, together with such accidents as may occur, hemorrhage, etc., calling for immediate measures, to act intelligently, if the medical attendant be absent, and be of valuable assistance if present. The management of the child also receives full attention, and the work seems in every way well adapted to the purpose for which it has been written.

Walsh's Physician's Combined Call-Book and Tablet. Seventh edition. Published by Ralph Walsh, M.D., 332 C street, Washington, D. C. Price $1.50.

Arranged very much on the plan of other similar books, and containing a large amount of such information regarding doses, poisons and antidotes, formulæ for hypodermic injections, inhalations, suppositories and pessaries, period of teeth cutting, disinfectants, urine analysis, post-mortem examinations, medico-legal examinations, treatment of asphyxia from drowning, incompatibles, the pulse, metric weights and measures, etc., etc., as the practitioner may want to look up at a moment's notice, Walsh's Call Book will be found admirably adapted to the wants of the profession. It is handsomely bound in red morocco cover.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA

A REVIEW OF A YEAR'S WORK.

At the opening of the New Year it has been our custom to cast a retrospective glance at the original articles of chief moment which have appeared in the columns of the REPORTER during the preceding twelve months. The custom is a good one, as it serves to recall to many readers what has escaped their memory and what they may be glad to turn to again.

Glancing over the numbers for 1881, the eye is attracted by the numerous contributions on the practical aspect of clinical medicine. We believe no journal in this country could show a richer list. Early in the year two series of articles attracted especial attention. The one was on endocarditis and allied conditions, by Dr. ALONZO CLARK, of New York, the other, on pneumonia and its treatment by venesection, by Dr. HIRAM CORSON. The latter prompted numerous replies and discussions in the various journals and at many societies. The treatment and varieties of nasal catarrh elicited several articles, by Drs. C. S. TURNBULL (Feb. 19th), GUSTINE (Feb. 26th), and BARTON (April 19th), the latter advocating the advantages of medicated gelatine. The employment of colchicum in acute rheumatism was set forth by Dr. FARNSWORTH (July 2d), and the disease itself discussed by Dr. HORNER (March 19th). Dyspepsia from nervous organic causes was the subject of several articles, by Drs. CRANDALL (May 14th, July 3d) and BIGELOW. The indications and abuses of chloral hydrate and opium were set forth in a number of contributions by Dr. KANE (January 29th, May 14th, etc.) SOUWERS (Nov. 12th, etc.), and other writers. The papers of Dr. HILL, on headache (July 23d), STONE on rœtheln (April 30th), BELL on malaria (Feb. 5th), LEE on the Swedish movement cure (Feb. 19th), and especially the careful study of the cause and character of the diphtheritic poison, by Dr. EVERETT (August 20th, 27th), will not have passed from the memory of readers.

The Diseases of Children have been discussed in various able essays, of which we mention that of Dr. MORRIS, on incontinence of urine in boys (June 11th), Dr. REED, on icterus neonatorum (March 26th), Dr. SIMON on typhoid fever in children (March 12th), etc.

Turning to Gynecology and Obstetrics, we select as specially noteworthy, Dr. BEVERLY COLE'S paper on the mechanical treatment of uterine displacements (June 4th), Dr. WOODWARD on coccygodynia (Oct. 8th), Dr. WATHEN on vesico vaginal fistula (Feb. 12th), Dr. WALLACE on the use of the forceps (April 2d), Dr. SACKETT on post-partum hemorrhage (Jan. 22d), Dr. DAVIS on placenta prævia (August 13th), Dr. STONE on the management of the perineum in labor (Dec. 3d), etc.

In the domain of Surgery the question of fixed dressings was well set forth by Dr. SOUWERS (Jan. 8th), and that of water dressings by Dr. BOYLAND (Oct. 23d). The prevention of vesical calculus was suggested by Dr. ROSS (Sept. 10th), and the treatment of hydrocele explained by Dr. WIGHT (Dec. 3d). On the specialty of the eye, we have had articles by Dr. SCHELL, who described that peculiar disease, "autumnal conjunctivitis" (Nov. 5th), Dr. LANDESBERG on glaucoma (Feb.

26th), Dr. Oliver, and others: while of articles on aural subjects, we must not fail to refer to the curious observations of Dr. C. S. Turnbull, on the penetration of a lumbricus into the middle ear, and its results (July 9th).

In what relates to Statistical and State Medicine, the first number for the year contained a valuable study of the relation of sex to consumption, by Dr. Sozinskey, bringing forward some entirely new facts in this connection. The hygiene of old age was well set forth by Dr. Vance, (April 16th), and that of infancy, by Dr. Boysen, (October 8th). The two curses of modern society, syphilis and drunkenness, have had ample attention. The lecture of Dr. Fournier, on syphilis in married life (January 22d), can justly be styled startling, and should give all the more weight to Dr. Swayze's suggestions (August 20th), for the protection of the community against this fell destroyer. As to drunkenness, the vivid pictures in Dr. Crothers' studies of inebriety (February 5th, May 7th, September 24th, etc.), Dr. Halloran's paper on dipsomania (March 26th), and Dr. Engel's, on chronic affections of the liver and stomach in drunkards (June 4th), show some of the terrible effects of this widespread vice.

This is but a hasty glance at a small part of the instructive original matter we have laid before our readers. We have not space to refer to the many lectures, hospital reports, and correspondence, that also contain much that is new and useful.

During the year, we have had translated a number of lectures from the most distinguished French and German clinical teachers, and we have reason to believe they have been well liked by most readers. Their themes have been practical, aiming to aid the general practitioner. Thus we may name Weiss on tetany (May 28th), Hardy on cirrhosis of the liver, Bettelheim on taenia (May 7th), Charcot on albuminuria (April 9th), etc. It is our intention to continue these carefully selected translations from time to time.

They have by no means excluded American lectures. Of these we have given a large number, by Drs. Pepper, Goodell, Clark, Mills, Wathen, Bell, etc., besides numerous strictly clinical addresses by the most eminent teachers in all branches.

The department of Special Reports, which we introduced at the beginning of the year, has been steadily maintained, and many readers have expressed their satisfaction at this method of presenting a survey of recent progress in the various specialties of our science. They will be continued as heretofore, and every effort will be made to render them full and accurate.

Such is an incomplete review of the two volumes we have laid before the readers of the Reporter in 1881. We have to thank the profession for its steady support of our endeavors to furnish the best matter in the best shape. It is easy to put out a journal with long reports and numerous extracts; our effort has been to condense and abbreviate. Beyond a certain size, a journal becomes cumbersome and unattractive. Such, now, are several of the English weeklies, and such seems the ambition of some in America. It will not be that of the Reporter.

Notes and Comments.

Mutilation of the Ovary in Situ.

Dr. N. M. Johnson, of Durham, N. C., reports, in the *North Carolina Medical Journal*, the case of a lady, aged thirty-five, who was suffering with severe neuralgia of the right ovary, for which, after all medicinal treatment had failed to give even temporary relief, it was decided to perform ovariotomy. An incision six inches and a half in length was made in the mesian line. Finding the organ firmly adherent to the back; near the upper right side of the sacrum, and fearing to break up so extensive an adhesion, and being further unable to use knife or ligature in so confused a space, it was decided to destroy the vitality of the diseased ovary by mutilating it with thumb and finger nail, which was effectually done and the mutilated organ left in situ. Its size was very little larger than an almond. After this the cavity was cleaned with carbolized spray, intestines replaced, and with needle and well waxed cord about seven sutures were taken through the whole thickness of the wall, including the peritoneum, and between the stitches, if any gaping, a narrow strip of plaster. A soft cotton rag wet in the carbolized water was placed over

the wound, and directed to be changed every thirty minutes.

The next morning the temperature was 101°; pulse 104. Liquid food was ordered to be given *pro re nata;* the carbolic cloths kept strictly up; and thirty drops of laudanum to be given three times daily.

The temperature and pulse rate increased gradually up to the fifth day, when they were, in the morning, temperature 103°, pulse 124; in the evening, temperature 103.5°, pulse 130. Then, with fluctuations, they gradually came down to normal on the eighteenth day.

On the twelfth day the opium was suspended, and an enema of warm water induced a tolerably free evacuation of the bowels.

On the sixteenth day the sutures were removed and the adhesive strips depended on for keeping the wound together, after which there was some little febrile action and pain.

The operation appears in every way to have been a success.

Sulphurous Acid in the Treatment of Diphtheria.

Dr. H. P. Yeomans, of Mount Forest, Ont., states in a communication to the *Canada Lancet*, Dec. 1, 1881, that in the treatment of diphtheria, which has been prevailing to a great extent in that locality since the first outbreak of it in an epidemic form in 1878, he has found a mixture of sulphurous acid and glycerine, equal parts, administered in doses of ten or twenty drops every hour or half hour to be most efficient. In addition to this he gives a solution of tincture of iron and chlorate of potash (to which, in some instances, quinine is added), every three or four hours.

The temperature of the room should be uniformly kept at 80°, and the air rendered moist by evaporating water continuously.

For the complication of croupy symptoms (diptheritic croup), he uses inhalations of carbolic acid and iodine.

He objects to using the brush in applying any remedy to the throat, and regards glycerine as the best article in which to administer sulphurous acid, because it is soothing and forms a protective covering over the tender diseased surface of the throat. When given in ten or twenty drop doses, it retains the sulphurous acid in the fauces, so that its specific effects may be obtained. This mixture frequently repeated and given without any water, is constantly retained, and acts remedially in the throat. As sulphurous acid is very volatile, it penetrates the nasal passages, operating there also quite as efficiently.

On the Indications for the Use of Morphia in Puerperal Eclampsia.

Dr. L. McFarlane, of Toronto, who has found morphia, administered hypodermically, to be a most efficient remedy in the treatment of puerperal convulsions, gives, in the *Canadian Journal of Medical Science*, for December, 1881, his reasons for regarding it as especially indicated in this disease. He first points out what he regards as the true cause of the convulsions, viz., anæmia of the brain, with increased irritability and general exhaustion of the entire nervous system, resulting from the disturbance of the circulation produced by the increased labor required of the heart in carrying on the fœtal circulation. In morphia we have a drug which produces an increased flow of blood to the nerve centres, and by its soporific effect allows the brain to rest while increased power is gained to carry on the nervous functions of the body. The control which morphine exercises over the disease, both in the preliminary stage as well as when the convulsions actually set in, is so prompt and decisive, he says, as to convince the most skeptical after having given it a fair trial. To give any preparation of opium in this disease by the stomach, he regards as of little if any use, as the sickly condition of the organ is such that the medicine is not absorbed in time to be of any benefit to the patient, and moreover, the remedy should be given early and in sufficient quantity (not less than from one-half to a grain) to control the convulsions at once.

Treatment of Wounds from Supposed Rabid Dogs.

No. 16 of the *Progrès Médical*, contains Mr. Durjardin-Beaumetz' conclusions on the above subject:—

1. A person having been bitten by a mad dog, or by one suspected of rabies, the wound must first be made to bleed, then washed, and finally cauterized.

2. All bites, whether trifling or serious, must *immediately* be made to bleed profusely by means of sufficient pressure. They must be washed in plenty of water, or any other liquid, (urine even), until cauterization can be effected.

3. This can be made either with Vienna paste, butter of antimony, chloride of zinc, or a red hot iron, the latter is the best of all, and any piece of iron heated *red hot* will serve the purpose.

4. These cauterizations must reach every part of the wound, and their success depends upon the promptness with which they are applied. Their application can be made by any one before the arrival of the doctor.

5. Cauterizations with ammonia, or with any kind of alcohol are entirely useless.

On the Etiology and Treatment of Tetanus.

In a paper read before the Central Ohio Medical Association, and published in the *Ohio Medical Journal* for December, 1881, Dr. J. H. Pooley, of Columbus, gives the history of a number of cases of tetanus, following various injuries and surgical operations. Nearly all these cases presented this common characteristic, that the wound was bathed in unhealthy discharges, and the Doctor believes the retention of pus in contact with the wound to be one of the most common exciting causes of this disease. He therefore enjoins cleanliness as a prophylactic measure. Under treatment he considers the free incision of wounds, amputation if there be considerable destruction of tissue, and anodyne and antiseptic dressings, for which purpose he gives preference to chloral. General treatment consists in absolute rest, the administration of calabar, which he regards as the remedy *par excellence*, to be given in full doses. Chloral and morphia he considers valuable adjuvants.

Muriate of Ammonia as an Anthelmintic.

Dr. H. L. Getz, of Iowa, writes to us, recommending this product as an anthelmintic. He says:—

"In prescribing it as part of a cough mixture, it was discovered that an anthelmintic effect was produced upon a child which had been taking the cough mixture, and feeling satisfied that if the mixture contained an anthelmintic, it must be the hydrochlorate of ammonia, I, therefore, resolved to test it, and have done so with good results.

Dose for a child five years old, five grains, about .30 gram, in water or syrup, three times a day, before meals.

Hot Water Injections in the Treatment of Dysentery.

Dr. John G. Earnest, of Atlanta, Ga., gives in the *College and Clinical Record*, Nov. 15th, 1881, the history of three cases of dysentery, in all of which copious injections of hot water resulted in almost instantaneous amelioration of all the distressing symptoms, and a speedy cure. This is precisely what we might expect from hot water, the principle involved being identical with that so fully demonstrated by Emmet and others in connection with gynecology.

Beginning with tepid water, the temperature is gradually increased until the limit of toleration is reached. In conjunction with the hot water treatment, the author uses ipecac in full doses (25 to 30 grains) and small doses of morphia hypodermically. From what we know of the action of these remedies, we should say that in their judicious combination we have the best means of combating this often most formidable disease.

Late Effects of Hereditary Syphilis on the Bones.

It is rare that a typical case of hereditary bone lesion from syphilitic disease is presented. Such a one was, however, shown at a late meeting of the Manchester, England, Medical Society, by Dr. Bury. The patient was twenty two. He was quite well till ten years old; then a skin formed over his eyes." He had now symmetrical interstitial keratitis. A little later, his mouth and throat became sore; there was now a hole in the right arch of the palate. At the age of eighteen he noticed that his legs were swollen; the tibiæ were now greatly thickened, and pieces of bone had come away from the right tibia. There was a large gap in the right side of the frontal bone, from which a sequestrum separated a few months since. Two sinuses near the middle of the forehead also led down to dead bone. The lower fourth of the left femur and the back of the right ulna were thickened. The left upper incisor was absent; the edge of the right upper was ground down.

Chronic General Peritonitis.

In the December number of the New York *Medical Journal and Obstetrical Review*, Dr. Alfred L. Carroll records an interesting case of chronic general peritonitis, which seemed to have taken its origin in an old pleurisy on the left side, the inflammation passing through the diaphragm and causing at first a peri-hepatitis, or perhaps an intermediate peri-splenitis. The case exemplifies a condition that has been classed among the curiosities of medical experience, for chronic general peritonitis, independent of tuberculosis or carcinoma, is either ignored or its existence denied by most writers, save as a protraction of an acute purulent attack, and the few who recognize its existence differ as to its pathology and clinical history.

On Chronic Rhinitis.

In a late thesis on this subject, Dr. Gourjon observes that arthritic rhinitis is very rare in infancy, less frequent in adolescence, and common in the adult. It is specially characterized by the presence at the entrance to the nostrils, of pustules very closely resembling those of sycosis or acne. Herpetic rhinitis, independently of the characteristics which are common to it and the other forms of rhinitis, is distinguished by an extreme tenacity and viscosity of the nasal mucus, "whitish and flabby, like a piece of albumen."

The treatment of simple rhinitis should consist in irrigations of the nasal fossæ and the insufflation of astringent powders.

Constitutional rhinitis, while we employ local treatment, demands an active intervention which tends to modify the general condition.

Mercurial Solution for Hypodermic Injections.

M. Yvon has been guided by the theory that a good mercurial solution for injections should not exert any local action, but be absorbed as rapidly as possible. It should, besides, not have the tendency of coagulating albumen.

The following formula gives a liquid realizing those requirements:—

R. Biniodide of mercury, 1 gram = gr. 15
Iodide of potassium, 1 " = " 15
Tribasic phos. of soda, 2 " = " 30
Distilled water, q.s. for 50 c.c. M.

This solution gives a slight bluish tinge to red litmus paper, and does not coagulate egg albumen. Indeed, when mixed in equal parts with a somewhat concentrated solution of egg albumen, it prevents its coagulation by heat.

Special Reports.

NO. I.—THE MANAGEMENT AND DRESSING OF WOUNDS.

No more generally interesting question in surgery can be named than that of the method of dressing wounds. It presents itself with the occurrence of every lesion, accidental or produced by the interference of the surgeon. There is as yet far from a unanimity on the point, as will be seen by the references which we shall subjoin. Of course, the *antiseptic* method has the most advocates at the present day, and to it we shall give priority.

ECONOMIC RELATIONS OF ANTISEPTIC DRESSINGS.

Prof. Nussbaum, of Munich, in one of his lectures, has some curious observations on these aspects of Lister's discoveries. We quote them from the Edinburgh *Medical Journal*:—

It is certainly easier and cheaper to apply a pad of charpie and some adhesive plaster. The antiseptic dressing which a barber would apply under such circumstances would not, however, cost more than half a mark. Dressings for wounds have become now altogether very complicated and expensive. Formerly cheap adhesive plaster and charpie, which the ladies picked in their leisure hours and gave to the surgeon, were employed, and dressings seldom cost many pence. Now the annual cost of the material for dressings which I employ, exceeds 30,000 marks. There is certainly a great difference between the two. It is also the case that an injury with the treatment of which a surgeon would formerly have been engaged for thirty or forty days, frequently heals up now in five or six days, and the surgeon makes very little out of it. But surgeons can and may state their expenditure, and no medical jurist would refuse to remunerate more highly such speedy and effectual assistance. Furthermore, surgeons do not exist merely for the purpose of making a comfortable income, but that they may render assistance to the sick and wounded, "tuto, cito, et jucunde."

LISTERISM AT HALLE.

In Prof. Volkmann's surgical clinic, at Halle, a strict form of Listerism is used. It is described in a letter to the *Medical Record*, as follows:—

Before operating, the sponges are placed in a 3 per cent. solution, as are the instruments. From time to time the wound is flooded with a 3 per cent. solution, from a small ordinary watering-pot without the sprinkler; and the pot is held high above the wound, so that the stream may fall upon it with considerable force. The catgut and silk used for sutures and ligatures are kept on spools which lie continually in carbolic oil, and the ligatures are cut off and handed to the operator only when required. At the completion of the operation, after the wound has been thoroughly flooded and closed, a hand-spray is used during the application of the dressing. The wound is dressed first with a piece of prepared oil-silk protective, only large enough to cover the wound. Above this is placed a wad of very soft carbolized gauze, which is not folded, but is shaken apart, and made into a soft mass. An abundance of this is used, and then it is covered by an ample piece of gutta-percha protective, reaching far beyond the limits of the wound, and sufficient to render difficult the communication of any discharge with the air. This is held in place with a carbolized gauze bandage. All the interstices are carefully closed with wads of salicylic cotton, the elasticity of which tends to render the dressing more secure; and when complete, the dressing, though seemingly sometimes redundant, fully realizes the object for which it was applied—the occlusion of the wound. When the wounds are opened and dressed, a simple hand spray is used, and the wound is thoroughly rinsed. For this purpose a can filled with a 3 per cent. solution is used, having an opening in its side just at its lower border, to which a rubber tube is attached. This tube has a small nozzle which can be inserted, if necessary, into sinuses. The can is held above the head by an assistant,

and the water thus runs into the wound with considerable force, or by lowering it, with as little force as may be desired. Sponges are used only in the primary operations, and never in dressing wounds; but pledgets of absorbent cotton, which, after being used, are thrown away.

A great difference in the results are claimed in favor of these minute precautions.

THE PRIMARY UNION OF OPERATION WOUNDS.

This is a result naturally much sought after by surgeons. A brief synopsis of the advice of two eminent surgeons, in papers read last August, at London, may be presented.

Mr. SAMPSON GAMGEE believes that the most favorable conditions are gentle manipulation, drainage, dry and infrequent dressing, pressure, and absolute rest, insure the maintenance of accurate apposition of the surfaces and margins of operation wounds, and prevent the effusion and accumulation of fluids within and near the wound. Primary union may be favored by control of the circulation, effected by position, elastic compression, and immobility. Absorbent gauze and cotton dressings are valuable for surface drainage, and, being highly elastic, facilitate soothing, uniform, and safe compression. Antiseptics, always useful in the treatment of wounds, are most called for in conditions where effusion or accumulation of rapidly decomposable products cannot be prevented by position, pressure, or drainage, as in the case of psoas abscess and empyema.

Prof HUMPHRY defined the principal causes of failure to be the delicacy and sensitiveness of the tissues in infantile and early life, which render them liable to inflammation and ulceration upon slight irritation; the deficiency of the nutritive energy requisite for the healing processes in the atonic and aged; observed most especially in the lower limbs when there is disease of the arteries; and, lastly, the presence of foreign substances in the wound, especially blood or bloody fluid, which separates the surfaces, and has a tendency to decomposition. Accurate apposition of cut surfaces, and prevention of the accumulation of bloody fluid, by non irritant sutures, rest, gentle pressure, and suitable splints, are the best methods of securing primary union. Effusion of blood after the stitching up of the wound must be prevented by carefully securing the vessels. Dr. Humphrey rather preferred the ligature to torsion, and considered the actual cautery as a useful adjunct. Sponging the wound promotes oozing at the time, and lessens the risk of further exudation. A drainage-tube should be inserted, and blood should be expressed from the wound as long as it continues to flow through the tube after the wound has been stitched up. Antiseptics are considered most valuable under the same circumstances as mentioned by Mr. Gamgee. Esmarch's band appeared to promote bleeding from cut surfaces soon after its removal, but to lessen the risk of further effusion.

INTRA-PERITONEAL WOUNDS OF THE BLADDER.

These extremely dangerous lesions have been experimentally studied by Dr. VINCENT, an abstract of whose investigations we find in the *Medical Times and Gazette*, Oct. 22d. The results may be summed up as follows:—

Immediate union has been obtained in all kinds of wounds of the bladder when the suture has been *immediate*. Treatment (opening the belly, suture of the bladder, removal of urine and extravasated blood from the abdominal cavity, with subsequent suture of the abdominal wall) has been successful, even after six and a half and eight and a half hours after intra-peritoneal extravasation. On the other hand, the operation has constantly proved useless when practiced twenty-four and a half, twenty-five, or twenty-five and a half hours after extravasation, the animals having succumbed to urinary intoxication rather than to the violence of the peritonitis. A vigorous dog may survive an extensive wound of the bladder with intra-peritoneal extravasation of urine and forty-eight hours when left alone. But it is well to bear in mind that in dogs, as in human beings, the susceptibility of the peritoneum differs widely; but even this would not materially affect the final issue.

On the whole, therefore, one may venture to assert that success will belong to the surgeon who operates early; laparotomy must be undertaken early if it is to save the patient. On the other hand, the presence of peritonitis, unless severe, or of uræmic symptoms, does not necessarily render it inadmissible. In civil practice this is not difficult, provided the patient applies early enough, and that the surgeon arrives promptly at a correct diagnosis; and it may be said that an error in diagnosis, leading to a laparotomy in a case where the bladder, turned out not to be injured, would be less serious than the want of recognition of an extravasation which had taken place. In the former case, the surgeon would at least be able to discover the causes of the symptoms which he believed were due to rupture of the bladder, while, due precautions being taken, the danger to life would be quite insignificant.

Dr. Vincent thinks that our present antiseptic dressings warrant operations which formerly would have savored of almost unpardonable temerity. "*Autre temps—autre chirurgie.*"

DEATH FROM CARBOLIC SPRAY.

Last May, before the Clinical Society of London, A. P. GOULD reported a case of rapid death after antiseptic osteotomy of the tibia, in a lad of eight years, due obviously to the carbolic acid in the spray.

Mr. GOULD discussed the question of the production of the fatal illness by carbolic acid. He showed that the vomiting, diarrhœa, nervous symptoms and temperature, were quite in accord with the symptoms undoubtedly produced by carbolic acid, although suppression of urine was a new fact. As nothing was before known of the minute changes in the apparently healthy organs in carbolic intoxication, we had to rely upon the symptoms only for deciding the cause, but it was held that the pathological changes did not contra-indicate the influence of carbolic acid. The quantity of the acid absorbed was probably very small indeed, but children were more susceptible to its influences than were adults. Idiosyncrasy also played an important part in such cases, and there was no evidence of the minimum fatal dose of the acid in man. In conclusion, Mr. GOULD maintained that his case was one of carbolic intoxication; and he was led to this view from the absence of other cause of death, and of any facts to negative it; and because the symptoms and *post-mortem* signs, with few exceptions, were those observed in that affection.

The President, who was Prof. LISTER himself, agreed in the conclusion as to the cause of death, though he thought it a misfortune the urine had not been examined. The patient happened to be extremely susceptible to carbolic poisoning, like a lady he had treated, in whom the application of carbolic dressing induced vomiting, which ceased on the substitution of boracic dressing.

The case excited a great deal of attention in surgical circles.

SUBSTITUTES FOR THE CARBOLIC SPRAY.

In view of the dangers which attend, in some cases, the use of the carbolic spray, Dr. A. W. M. ROBSON, of Leeds, calls attention, in the *Brit. Med. Jour.*, October 15th, to some experiments with vapor of oil of eucalyptus and oil of cajuput. These substances also appear to have the power of checking the development of organic life. He writes about them:—

The experiments related go far to prove that, in the vapor of eucalyptus, cajuput, and other similar volatile fluids, we have powerful antiseptics, which, at the ordinary temperature of the atmosphere, may so saturate the air as to kill all infective particles; perhaps, not only bacteria and micrococci, but also the germs of fevers and other infectious diseases.

In a chamber regularly used for operating, there would be no difficulty in having a large pair of bellows, worked by hydraulics, to pump a continuous stream of air, which might be carried to any part of the room by means of a flexible tube; the air having been forced through two or three wash-bottles containing pumice-stone and the volatile oil, cajaput or eucalyptus. If the end of the tube have a large bell shaped opening, the current of air will diffuse itself over a radius of many feet.

He thinks that oil of peppermint, terebene, and other volatile substances would answer as well.

ANTISEPTICS IN OVARIOTOMY.

Dr. KEITH and Dr. BANTOCK, of London, have both renounced the use of the spray in ovariotomy, and returned to the old system, pure and simple, with the best results (*Lancet*, Sept. 24, 1881). The latter observes:—

"If we are to accept the experiments of Mikuliez, the spray must be injurious, inasmuch as he has found that the spray contains four times as many bacteria as the undisturbed air of the room, and that as these bacteria are dry and not in a state to be acted upon by the carbolic acid, they thus gain access to the peritoneal cavity uninjured and ready for their dire work. But we may rest in peace on this account, seeing that the living tissues are able effectively to dispose of them provided they be deprived of appropriate nidus by using a drainage tube."

The drainage-tube is thus a necessity in those cases where the spray is used, whereas it may be dispensed with in many where it is not employed.

THE ANTISEPTIC TREATMENT OF WOUNDS IN WAR.

This was the subject of a paper read before the International Medical Congress, by Surgeon-Major H. F. L. MELLADEW, M.D. This paper was chiefly founded on the reports made by surgeons who had served in the Russo-Turkish war. The more rigorously antiseptic principles were followed out on the field of battle, at the dressing stations, and at the hospitals, the better were the results. The work of the surgeon was much simplified, for there was no necessity for frequent renewal of the dressings, and more time could be given to the severe cases. The wounded could be more rapidly removed, and were carried to the rear of the battle field, and, if thought advisable, to their homes, in much more favorable conditions than under the ordinary plans. Convalescence was much more rapid. The author quoted the authority of REYHER, CASSIMERER, PIROGOFF, and other surgeons, in favor of the use of antiseptics in war. BERGMANN had successfully treated gunshot fractures of the knee by at once washing the limb with a solution of carbolic acid, then wrapping it in cotton dipped in a solution of salicylic acid (10 per cent.). This cotton was covered in with gutta-percha, and the limb was rendered immovable by plaster-of-Paris. In several of the cases, the wound was found to be healed the first time the dressing was removed. The author insisted on the importance of not at-

tempting to examine the wound by the sound or the finger, and quoted LANGENBECK in support of the principle, which was followed by most of the Russian surgeons in the war. The experience of the Russian surgeons had shown that septic wounds could be rendered aseptic, even though a fortnight had elapsed since their infliction. This had been proved by CAMMERER at Plevna, and by WATRASZEWSKI in the Caucasus. In conclusion, Dr. MELLADEW described a packet of dressing which, he said, every soldier should carry sewn in his coat below the clavicle. He objected to metallic cases, because they might be injured by pressure, and if a ball struck them, they might act as foreign bodies. He recommended a case of linen impregnated with caoutchouc, containing a triangular bandage, a piece of antiseptic lint about eight inches long by three inches wide, and a gauze bandage, one yard long, enclosed in parchment paper. The packet was very cheap, easily prepared, and small.

A SIMPLIFIED ANTISEPTIC DRESSING.

In the *Gaz. Med. de Strasbourg*, 1881, No. 3, E. BOECKEL describes a modification of the antiseptic method of dressing wounds, which he claims to be cheaper, simpler, and more generally practicable than the "Listerian" method. The dressing used is red tarlatan cloth which has been steeped for eight days in a solution composed of

℞.	Carbolic acid,	3 pts.
	Glycerine,	5 "
	Alcohol,	5 "
	Water,	50 "

in a tightly-covered vessel. In urgent cases, as in military practice, one or two hours' steeping might be enough. The cloth is applied wet, and just before being used is dipped into tepid water to get rid of the excess of acid. BOECKEL seeks to obviate the irritating effects of the acid on the skin, and also the risk of carbolic poisoning, by interposing between the skin and the carbolized tissue a layer of tarlatan wetted with plain water. The margin of the dressing is rendered secure against admission of air by strips of wadding, the whole is covered with some impermeable material, and fixed with a firmly applied damp bandage. The impermeable material may be gutta-percha, paper, parchment paper, or oiled paper.

The spray is only used in operations when serous cavities or joints are opened. In other cases, frequent flushing of the wound with antiseptic fluid is considered sufficient.

The author used this in sixty consecutive cases of major operations—*e. g.*, amputations, excision and incision of joints, and laparotomy, and among these were only two deaths, but in both cases the parts were "septic" before operation.

IODOFORM IN UNHEALTHY WOUNDS.

At the Surgical Congress held last spring, in Berlin, a discussion of the value of iodoform in surgery was an interesting feature. In Vienna, especially, the use of iodoform as a dressing of unhealthy wounds has long prevailed, but now it is used somewhat differently, and much more thoroughly. In joint diseases, caries, cold abscesses, etc., the diseased bone, fungous granulations, and other abnormal tissues are removed with knife or curette, the cavity thoroughly washed out with carbolic acid or thymol, and *entirely filled* with iodoform. A usual dressing of gauze and Mackintosh is then applied over all, and the part immobilized by means of an organtine bandage. Unless the discharge soaks through the dressing it is not removed for one, two, or even three weeks. The results obtained have been remarkably good, cases having been cured that would have been amputated under the older methods of treatment. The iodoform diminishes the secretion, prevents its decomposition, and prevents the formation of tubercle in the granulations or destroys them if they are already present. This specific local action on tuberculous granulations has been repeatedly observed, portions of the tissues being examined microscopically before and after its use. This may easily be observed where the granulations have not been first removed.

This observation of the action of iodoform upon tuberculous masses with which it is in contact, led to the trial, in Professor Billroth's clinic, of injecting an ethereal solution of iodoform into joints in the early stages of fungous inflammation, and into other suspected tuberculous swellings. A solution of iodoform in ether, one part to five, is injected with a hypodermic syringe directly into the joint or tumor in several places, one or two syringefuls being used. The ether is immediately absorbed, and the iodoform is left in substance in contact with the diseased tissues.

SPONGE AS A DRESSING.

Dr. JAMES HARDIE, of Manchester, England, called attention to the value of sponge, in a recent article in the *Lancet* (Oct. 15th). He stated that his belief of the proper action of a surgical dressing, was not so much one to absorb discharges, as to render discharges unnecessary. He proceeds:—

For some years past I have been endeavoring to dress wounds with this end in view. I have found that by the use of sponge bandaged over

the surface of the stump or other part, one is often able to secure perfect union of a wound without discharge, and without the need of changing the dressing until the union is complete and sound. Sponge, as you know, is a material which is readily compressible into a very small bulk, and which also possesses a high degree of elasticity or resilience, so that pressure being removed, it immediately resumes its former size and shape. Besides this, its highly absorptive properties, which are commonly taken advantage of in surgical practice, are well known to all of you. For these reasons sponge appeared to be a material well adapted for the purpose I had in view, first and chiefly, to exercise a continuous and elastic pressure, and, secondly, to absorb readily any discharge which might perchance escape from the wound. The sponge I have hitherto mainly employed has been the large-celled honeycomb, and the manner in which I used it is briefly as follows: Antiseptic precautions are used throughout. All bleeding points are carefully closed. Frequent sutures are inserted, so as to bring the edges accurately together. No drainage is used. The sponge, having been soaked in carbolic lotion, is squeezed tightly, to expel every drop of superfluous moisture. The flaps of the stump are meanwhile carefully pressed together by the surgeon, in order to force out any blood which may have collected during previous procedures. And let me urgently draw your attention to this point, since want of thought about it will frequently cause disappointment. Diligently compress the flaps together with your fingers, and so squeeze out every drop of blood; then relax not your hold for an instant, but skillfully place the compressed sponge over the surface, and hold it, and as many more sponges as may be required to cover the entire surface tightly with your fingers, while an assistant secures them in place with a bandage. Sometimes this is rather difficult to do, but by stitching sponges together, some assistance may be gained. The bandage having been applied, you may now cover the whole with antiseptic gauze, or with tenax, with a piece of mackintosh over all; these again are secured with another bandage. In many cases it is advantageous to use as a bandage a piece of elastic webbing. This you may do if you choose.

Especially in smaller wounds he has found this plan most satisfactory.

EUCALYPTOL AS A DRESSING.

During the last summer Mr. LISTER spoke several times favorably of the substitution of eucalyptol for carbolic acid in the spray. A writer in the *British Medical Journal*, gives its pharmacy as follows:—

The substance which we call the oil of eucalyptus is, or was very recently, called eucalyptol by the French chemists. The term is a more convenient one than ours; and, as it corresponds with our other antiseptics—phenol, thymol, etc.—we may accept it, without inquiring too curiously as to its chemical accuracy. The substance, indeed, is only the lighter and more volatile portion of the oil of eucalyptus, which distils over at a temperature below 175° C. (347° Fahr.); a second substance passes over at a temperature of 188° to 190° C. (360° to 374° Fahr.); while a third remains in the retort. On account of the slight solubility in water and its great volatility, Mr. Lister recommends that the eucalyptol should be mixed with damar gum; but it will probably be found that eucalyptus gum—or rather resin—from which the tree derives its popular name in Australia, will be found more suitable. The French have long been employing a combination of the kind, under the name of the *Alcoolature d' Eucalyptus*, a common tincture of the fresh leaves, containing a large amount of the essential oil and resin, some tannin, and probably a little chlorophyll, as it is of a dark olive color.

CREASOTE AS A DRESSING.

This substance was especially recommended by Inspector General MOUAT, member of the Section of Military Surgery at the International Medical Congress. He remarked of creasote that it does not volatilize, and the only objection to it is that it is not easy of solution. But that was easily overcome by using it in a mixture of acetic acid and mucilage, which is readily retained in water; and it retains its powerful odor in all circumstances. About forty years ago, he had occasion to perform an operation in very unusual circumstances. A soldier had been carrying a musket on his shoulder, and the lightning struck the musket and exploded it, twisted the barrel into a coil, and shattered his hand into portions. He amputated the hand with the flap in the usual way. The next day, he saw maggots in the wound. He used creasote to remove them, and had some difficulty in making the solution, until he overcame it as just stated. The result was that the maggots at once disappeared from the wound, which took on a healthy action and healed by first intention in eleven days. Twenty-five years afterwards, the same thing happened in the Crimea, at the assault on the Redan. All the amputations were affected with maggots. He at once applied creasote, and the wounds took on healthy action, and they found subsequently that when a dressing was soaked with this creasote solution, the flies immediately left the dressing.

DRY CARBOLIZED DRESSING.

One of the German speakers at the International Medical Congress, Dr. BECK, proposed the use of dry carbolized cotton wadding for dressings in the antiseptic treatment of wounds, in preference to the spray and wet dressings. He mentioned that this mode of dressing had been used with the best results in the garrison hospital at Carlsruhe (Baden). He described the mode of preparing the carbolized cotton-wool, and the method of using it. He detailed chemical experiments, the results of which had been to prove

that cotton-wadding thus prepared did not lose the carbolic acid with which it was sprinkled in any important quantity for certain periods of time. He alluded to various disadvantages of wet carbolized dressing from which the dry dressing was free. He also referred to objections to dry carbolized tow or jute, from which the cotton-wool dressing was free. He regarded the method he described as being simple, the material cheap, and the dressing one which could be applied easily.

ALCOHOL DRESSING.

Very excellent results in operation wounds are obtained by Prof. ESMARCH with alcohol dressings. He employs pads soaked in absolute alcohol, fixed to the wound by an iodoform bandage. A pillow of jute and gauze is laid over the dressing, and covered by a wet bandage, which is lastly, enveloped in an elastic bandage. His statistics are as follows: In 398 major operations, 85 per cent. of the cases cured healed by first intention, with one dressing; in 15 per cent. the dressing was renewed. There were 146 excisions of large tumors, 40 excisions of mammæ and axillary glands, 14 castrations, with one death from pericarditis and old syphilis, one from apoplexy, one from fatty heart. Of 51 major amputations (thigh 18, leg 27, arm 5, forearm 1), one died from shock and hemorrhage, and one from delirium tremens. There were 61 resections; 11 exarticulations; 26 operations for necrosis; 13 nerve stretchings, one for tetanus, which was fatal; 8 hernias; 21 large cold abscesses; 12 large wounds; 49 compound fractures. Thus the mortality was only 6, or just over 1½ per cent.

SALICYLIC SILK AS A DRESSING.

This substance is highly commended in the *Lancet*, Oct. 8th, by Mr. W. H. BROWN. He says:—

The manner in which I employed the silk is as follows: After having carefully rendered the wound aseptic, according to Mr. Lister's directions, I place over the wound a strip of gauze, soaked in a five per cent. solution of carbolic acid; then surrounded the wound with a double handful of salicylic silk; over this I put the gauze and mackintosh pad, and bandage in the ordinary way. It is a most important point to have the silk thoroughly teased out; in my earlier cases I was not successful, owing, I believe to the fact that I used the silk in masses. One handful of the material, as sent out in parcels, should yield about four times that quantity after being teased. Another point is to bear in mind that salicylic silk has not power to render aseptic an already putrid wound; so long as the discharges are sweet, so long will the silk maintain them aseptic; but if the discharge be putrid, no amount of silk dressing will render them sweet.

He gives a tabular view of the result of a number of cases treated in this manner, including amputations, resections, etc., which show strongly in its favor.

(*To be continued.*)

CORRESPONDENCE.

Susceptibility to Variola.

ED. MED. AND SURG. REPORTER:—

In your issue of Dec. 3d, I notice some points raised by Dr. Helm, regarding the susceptibility of a certain class to variolous poison; one of his points has been the subject of some study on my part, and hoping to gain the opinion of older and more experienced men, I am led to give a few of my observations. I refer to his third question. I find among the laity an almost universal opinion, and, indeed, among some physicians, that an attack of any of the zymotic diseases in the pregnant female will exempt the child from future attack. But from my own experience, and others which I have seen, I am led to the conclusion that if such is the rule, the exceptions to it are so numerous that but little dependence can be placed upon it as a prophylactic means. Of the considerable number of cases I have collected I will cite but three.

CASE 1.—Mrs. N., primipara, aged 27, was attacked with anginose variety of scarlatina, about the eighth month. About five days after the onset of the fever she was delivered of a pretty large boy, presenting a characteristic rash all over his chest, neck and face; this subsided and disappeared in about two days, the child showing no further symptoms, but died in its third year, of the same disease in the malignant form.

CASE 2.—Mrs. R., during her second pregnancy, was attacked with the measles—this was during the fourth month. She went to her full term, the child showing no evidences of the malady, but it subsequently did have a well defined case of the same disease.

CASE 3.—Mrs. P. was vaccinated during her first pregnancy, and so violently did the virus attack her that she was confined to her bed for two weeks; the scars (two in number) are as large as a silver half dollar. The child was recently vaccinated by myself, and it worked very successfully, a well marked scar showing in each place.

Such cases as these, and others that have come to my notice, convince me that little dependence can be placed in the fact that the pregnant female has had a contagious disease, or that she has been vaccinated while in this condition. I believe that in every person who has a contagious disease there is a special affinity for the poison of that particular disease, and that this affinity is an abnormal condition, a disease, so to speak, the conditions necessary to the existence of which we are at present in ignorance of, and hence we cannot say whether or not it may exist more than once. I believe that an attack of the disease exhausts this affinity and thus renders the subject exempt till the condition re-exists. Believing this, it is easy for me to see why many cases occur where the child fails to be exempt, even where the mother has been attacked while it was a fœtus in utero.

Colfax, Iowa. FRANK PORTERFIELD, M.D.

A Case of Precocious Development.

Ed. Med. and Surg. Reporter:—

On the 5th of October, 1881, I was called, in consultation, to see two children having typhoid fever; the elder a boy of twelve, the younger a girl of eight in March last. Having learned the age of this little girl. I was every now and again struck with something in her appearance and behavior incompatible with her age. Her limbs appeared stouter, the expression of the face partly that of the child, and partly that of a woman; a curious, undefinable mixture of the two. I also noticed the same curious blending of the woman and the child in the mind and nervous system. I saw her again a few days later, when I was more than ever struck with the womanliness of this little girl.

All this was explained to me, when her father communicated to me the fact that she had already menstruated twice; the second time just before the onset of fever.

I communicate this case as one of sufficient interest to challenge attention, on account of the very unusual precocity of the menstrual function, as well as of physical and mental development accompanying. This little girl has made a recovery from the attack of fever, and I shall take an interest in her future history.

T. M. Harris, M.D.

Harrisville, W. Va., Dec. 27th, 1881.

Carbolic Acid as an External Application to Piles.

Ed. Med. and Surg. Reporter:—

On November 28th, 1881, Mrs. J. L. B., aged 34, gave birth to her third child, a large boy. There was nothing unusual in her labor, except that the second stage was prolonged by the cord being encircled three times around the neck of the child. When the head was born, in order to prevent asphyxia of the child, and to give complete birth to it, after attempting to unwind the cord from the neck of the child, but failing, I concluded to cut the cord. Mrs. B. did well till December 8th, when she was attacked with metritis accompanied with excessive diarrhœa. On December 11th her temperature arose to 105° and pulse to 140, and she became very delirious. I injected into the vagina, every three hours, a solution of hot water and carbolic acid, ʒj to the pint; warm poultices of flaxseed meal over the abdomen, and a teaspoonful of the solution of sulphate of morphia every six hours, and withdrew her urine by silver catheter. She finally recovered and was able to sit up on December 21st.

Mrs. B., during the last three months of her pregnancy, suffered severely with external and internal hemorrhoids. She stated that she suffered about the same length of time in her other pregnancies, and also for six months after the birth of each of her first two children. I discovered upon examination after she had been attacked with metritis, that there were about a dozen hemorrhoids around the anus, some as large as a walnut, others smaller, which were very much inflamed and irritable. I had a knowledge of the fact that a strong solution of carbolic acid injected into a pile was stated to be a specific plan of treatment. It is claimed that the remedy acts in effecting the cure by coagulating the blood in the pile or piles so acted upon; but it is not certain that carbolic acid does effect the cure in this way. Reasoning from the above premises, I thought the same effect might be produced by the absorption of carbolic acid. I therefore, when her convalescence from metritis was established, determined to bathe the projecting piles with a warm solution of carbolic acid $\frac{1}{30}$ and also to inject into the rectum, for the internal piles, a warm solution of carbolic acid, ʒj–Oj. In two or three days the inflammation, irritation and pain of the external hemorrhoids subsided, and the piles contracted, and at my writing, December 27th, she is perfectly well of both external and internal piles. I merely suggest that the absorption of carbolic acid, either by ointment or solution, may have, as I believe it had in the case of Mrs. B., a beneficial influence in the cure of piles. I hope some of my professional brethren will make further trial as to the efficacy of this remedy in the cure of piles by absorption.

J. M. Batten, M.D.

73 *Sixth Avenue, Pittsburgh, Pa.*

News and Miscellany.

Antagonism of Typhoid and Intermittent Fevers.

Dr. Edwin M. Snow says, in his last report as Health Officer of Providence, R. I.—

There was only one death in Providence from typhoid fever in the month of November; the annual average in November, during the ten years previous, was nearly nine. During the ten years previous to the present, in the four months, August to November inclusive, there was a total of 298 deaths from typhoid fever in Providence, or an average of 29.8 in each year. During the same four months of the present year, there have been only ten deaths from this disease. We are not prepared to explain this difference. It has been said that intermittent fever and typhoid fever are, to some extent, antagonistic, and that when fever and ague is present, typhoid fever disappears. This needs confirmation; but there has been much fever and ague in Providence this fall, with a very great decrease of typhoid fever, while in Boston, during the present autumn, there has been a very great amount of typhoid fever, and very little, if any, intermittent fever.

Dispensary for Diseases of the Ear.

The Trustees of the Presbyterian Hospital in this city have authorized the formation of a Dispensary service for diseases of the ear, to be held every Monday, Wednesday, and Friday afternoons, from four to five o'clock. This service will be in charge of Dr. C. H. Burnett, the aurist of the Hospital.

Items.

—The yellow fever epidemic on the island of Barbadoes baffles the skill of the authorities. No sooner is the disease subdued in one district than it reappears in another.

—A Pay Hospital for women in moderate circumstances has been organized at Atlantic City. Particulars can be learned from Dr. W. H. Bennett, 332 South Fifteenth street, Philadelphia.

—Dr. Thomas W. Grimes, aged about sixty years, and a prominent physician of Columbus, Ga., died suddenly, while sitting in a chair, December 12th. Heart disease is assigned as the cause.

—A German in Chicago, aged fifty-five, was bitten by a Spitz dog seven weeks before, and died of hydrophobia at his residence in that city, December 18th. It is alleged that this breed of dogs is peculiarly subject to hydrophobia, and hence especially dangerous as pets.

—Mental Pathology: "Don't you think," asked Brown, "that Pingrey is laboring under a hallucination?" "No, I don't," replied Fogg; "he has a hallucination, but I don't believe he is laboring under it. I never knew him to labor under anything."—*Boston Transcript.*

—A family of seven persons, named Lacy, have been badly poisoned in Bloomington, Ill., by eating canned fruit. In such cases the accident is usually attributed to some of the poisonous salts of tin derived from the action of the vegetable acids on the metal of the can. The condition of the fruit itself may have been at fault.

—The *Pekin Gazette* publishes a decree of the Emperor Ouang-su, announcing that the second reigning Empress, who had been ill for some weeks, has recovered her health and resumed the direction of the affairs of the State. The same decree confers a whole crowd of honorary distinctions, such as peacock feathers, red and blue buttons, etc., on the members of the college of physicians of the court, twenty-four in number, who daily visited the august patient and felt her pulse, one after the other.

—An exchange has the following just comment on a recent sanitary lecture: "Dr. Pulte, speaking of smallpox, says, 'the pustules first appear on the face, then on the breast, and lastly on the extremities. Thus, a wise Providence has divided the burden into three parts, which would otherwise be unbearable.' Wouldn't it have been a good plan to divide it still more, so as to make it harmless? Even with the present wise arrangement it proves 'unbearable' in many cases. If Dr. Pulte is not ashamed of such puerile reasoning, then he ought to be."

OBITUARY NOTICES.

JAMES M. SHEARER, M.D.

Doctor Shearer died at his residence in Dillsburg, York county, Pa., on the morning of December 14th. He was graduated from Dickerson College, Carlisle, in 1853, and a graduate of the Pennsylvania Medical College in 1858, and immediately thereafter began the practice of medicine in Dillsburg, in connection with his father, the late Dr. Geo. L. Shearer. Soon after the outbreak of the late civil war, the Doctor entered the service of the United States, serving in the capacity of Assistant Surgeon and Surgeon, with credit, in the various field and hospital duties to which he was assigned. In 1866 he returned to Dillsburg, and again resumed the practice of medicine, in which he was actively and successfully engaged until about two years ago, when he was attacked with the illness which terminated his life.

Dr. Shearer was a man of more than ordinary attainments, and of a genial and generous character. Resolutions of respect to his memory and of sympathy with his family, were passed by the York County Medical Society and have been received by this journal.

PROFESSOR PIROGOFF.

The death of Dr. Nikolaus Pirogoff is announced from St. Petersburg. He was Professor of Surgery to the Medico-Chirurgical Academy in St. Petersburg, and a member of the consulting staff of several hospitals in that city. In 1840, he brought out a valuable treatise on the division of the tendo-Achillis in orthopædic surgery. He also wrote on cholera, on the surgery of the arterial trunks and of fasciæ, and on the medical aspects of the Caucasus, and on topographical anatomy. His work on this last subject forms a fine atlas of anatomy, as illustrated by frozen sections. It is with military surgery that his name will ever be most closely associated. He is the medical historian of the Crimean and Circassian campaigns; and also wrote a report on the permanent and improvised military hospitals in Germany and Alsace-Lorraine during the war of 1870. The late Professor is best known in this country from the operation named for him.

DR. BRIQUET.

Within a month of the death of Professor Bouillaud, the Nestor of the Academy of Medicine, the other Nestor, Dr. Pierre Briquet, has passed away at the same age—eighty-six. They resembled each other in their constant attendance at the meetings of that learned body. Indeed, of Dr. Briquet, it has been declared that he never missed a meeting since his nomination in 1860. Like Bouillaud, too, shortly before his death he read a memoir, being a kind of supplementary chapter ("Prédisposition á l'Hystérie") to his well-known work on hysteria. He was for a long period Physician to La Charité, and wrote on cholera and many other medical topics.

QUERIES AND REPLIES.

Pumpkin Seed.

Dr. N. L. F., of New Hampshire, writes: "Will some reader give the chemical ingredients and medical properties of the pumpkin seed? Is it narcotic?"

Antiseptic Treatment.

Dr. D. S. B., of Pa., asks: "Whether the antiseptic treatment was originated by a French surgeon or by Lister? The claim to its discovery has been made by more than one Parisian surgeon, but that peculiar plan called *Listerism*, is undoubtedly a device of the surgeon from whom it is named. It was introduced into France chiefly by Lucas-Championniere, and Prof. Fonssagrives, who is never behindhand in preferring the just claims of his compatriots, unqualifiedly attributes it to the Scotch surgeon. (See his *Traité de Therapeutique*, vol. II, p. 176).

THE

MEDICAL AND SURGICAL REPORTER.

No. 1298.] PHILADELPHIA, JANUARY 14, 1882. [Vol. XLVI.—No. 2.

Original Department.

Lecture.

MEMBRANOUS CROUP AND LARYNGEAL DIPHTHERIA.

Delivered at the Medico-Chirurgical College, Philadelphia,

BY HUGO ENGEL, A.M., M.D.,

Professor of the Principles and Practice of Medicine and of Clinical Medicine, etc., etc.

Gentlemen:—It is really remarkable that, notwithstanding many eminent authorities have proven, over and over again, that membranous croup and laryngeal diphtheria are two totally different diseases, utterly distinct from each other, there are still many physicians who believe in the identity of the two maladies. Only a week ago, one of our oldest medical journals,* enjoying a very large circulation, published a communication intended to show that the two diseases are one and the same. Regarding treatment, and especially prophylaxis, however, it is of the greatest importance to distinguish between both maladies, and I shall endeavor, in the following, to point out to you the differences existing between them, and I hope to be able to convince you that they are not identical affections.

What is membranous croup, how does it begin, what is its cause, its pathology? First, it is a disease met with in childhood only. The child, after having been exposed to a cold draught, or after having taken cold in some other manner, goes to bed well and apparently in perfect health. About midnight it suddenly awakes with a hoarse cough, sounding like the barking of a dog, with difficulty of breathing, a hoarse voice, high fever and a rapid pulse. After a few such seizures the child falls asleep again, but the fever continues. The next day the child's voice is still hoarse, it still has fever and some dyspnœa, and occasionally the "croupy" cough, but it plays, and excepting the affection of the larynx and the symptoms mentioned, nothing seems to ail it. When you now look at the parts at the back of the buccal cavity, the tonsil, soft palate and pharynx, you may find them a little red, but nothing more. If you have an opportunity of inspecting the larynx, you will see its whole mucous membrane inflamed and swollen, especially that of the true vocal cords. The next night the child becomes decidedly worse. The spasmodic seizures of coughing and of alarming dyspnœa appear more and more frequently, the voice or cry gets hoarser, and the difficulty in breathing greater and more continuous, while the fever does not abate. Inspecting now the pharynx and neighboring parts, you see nothing more than at first, but in the larynx you observe a grayish-white membrane lining the infiltrated and inflamed mucous and submucous tissues. The child is still strong, fighting, as it were, against the disease, and may now get well if, by vomiting, the false membranes are expectorated, and no new formation of them takes place. In such a case, the voice gradually regains its clear sound, the cough becomes moist and loses its barking character, the difficulty in respiration and the fever leave, and within a day or two the child is *totally* well, never under any circumstances suffering from any sequelæ whatever. But if the case takes an unfavorable turn, the voice soon becomes whispering, the cough spells gradually cease, the dyspnœa changes into apnœa, and the at first bluish, later pale appearance of the

* Medical and Surgical Reporter, December 3d, 1881, page 631.

face, with its expression of terror; the blue lips and the pitiful, but fruitless endeavor of the poor sufferer, to inhale air; the longing of the system for oxygen, precede the terrible closure of the sad scene—the fearful struggle for life—the death by suffocation. Happily death soon sets in; poisoning of the blood from accumulation of carbonic acid, or rather from want of oxygen in the blood, produces early total insensibility, so that the suffering is felt less by the doomed child, which dies in coma. During the last twenty-four or thirty-six hours you may observe, when then examining the throat, an extension of the false membrane, from the larynx upward into the pharynx. And you will further notice, that the child's strength commences to give away then only, when the repeated attacks of vomiting, or at last the want of oxygen in the system, have undermined its vitality. Towards the end of the malady, when death is near, you will detect albumen in the urine, not, however, till the dyspnœa has become greater and constant. (A similar albuminuria is met with in all diseases in which great difficulty of breathing forms one of the main symptoms, as, for instance, in pneumonia, in asthmatic seizures, etc.) But there is no enlargement of glands, and no complication whatever makes its appearance.

In some cases, especially in somewhat older children, of about four or five years of age, the beginning of the disease is sometimes in so far slightly different, as a common bronchial catarrh may, for a few days, precede the outbreak of membranous croup; otherwise the course of the malady is as described.

Let me now, gentlemen, draw before your mental eyes a picture of an attack of laryngeal diphtheria, and for the sake of better comparison, as we see it in children, though adults also may be affected by it. At first you will find that diphtheria is either endemic or epidemic at the place, or you have the fetid odor of badly smelling water closets pervading the house, or the child had been visiting, within the week preceding its illness, a locality where the contagion existed. The first symptoms the little patient generally gives of being sick are: the child loses its appetite, has a moderate fever, and complains of pain when swallowing. It ceases playing almost from the very beginning, drops its head, and shows other signs of weakness by complaining of feeling tired, by not wanting to walk and preferring to lie down. If you now examine the child you will find, on each side, the glands under the angle of the lower jaw swollen, generally on one side much more than on the other, and on inspecting the parts you will notice a patch of false membrane over one or both tonsils, or over a part of the posterior wall of the pharynx, or over the soft palate, extending sometimes along the roof of the mouth. The child has an utter disgust for food, there is a bad odor of the breath, a moderate fever, and a remarkable weakness. If the glands are enlarged on one side specially, you will observe the deposit of false membrane on that side of the throat. On removal of the membrane, you will see below it the healthy mucosa. After the child has been ailing this way from three to five days, getting weaker from day to day, and beginning, perhaps, already to show evidences of septicæmia, it commences to cough. This may happen any time of the day or night, mostly toward morning. The cough has a croupy sound, and the voice becomes hoarse. If you now look at the throat and the larynx you will observe that the false membranes have extended from the tonsils or pharynx down over the epiglottis into the larynx. From the moment of the further extension of the false membranes—they may now spread upward over the posterior nares, or downward into the larynx—you will detect, on examining the urine, that it contains albumen, as it does in every grave case of diphtheria. The albumen does not wait with its appearance till great dyspnœa sets in, as is the case in membranous croup, but is present from the moment the diphtheria takes on a grave aspect. The case of the child with laryngeal diphtheria progresses now, as far as laryngeal symptoms are concerned, the same way as membranous croup, only you can notice the child fighting less against the disease; it gets weaker and weaker, and you observe, clearly, that there is another factor evidently, besides the threatening suffocation, producing the fatal end, and that is blood poisoning. And it frequently happens that the child dies at the very onset of the laryngeal symptoms, death often taking place long before the accumulation of false membranes had been sufficient to induce death by closure of the glottis, by suffocation. Sometimes endocarditis sets in, hastening the fatal end, or what also never is observed in membranous croup, the membranes extend upward over the Schneiderian mucous membrane of the nose. In case the child gets well, the symptoms do not rapidly cease with the expulsion of the membranes from the larynx. No, the child only very gradually regains its strength, and convalescence lasts at least two weeks or longer. Frequently, some days after the disease is apparently over, the mother suddenly observes that the child, when drinking

water, cannot swallow, and that the fluid returns by the nose again; paralysis of the soft palate has set in, and this is always followed by other local, or by general paralysis, sequelæ which never appear in membranous croup.

From the description I have given you of the two diseases, you will have observed that the following differential points clearly distinguish membranous croup from laryngeal diphtheria. For their better contrast, I have written this table on the blackboard, showing the differences mentioned:—

Membranous Croup.	*Laryngeal Diphtheria.*
Is due to exposure to cold.	Due to a specific poison.
No period of incubation.	Period of incubation 1 to 5 days.
Is a local disease, consisting of an inflammation of the mucous membrane of the larynx with exudation of false membranes.	Is a constitutional disease, where bacteriæ are deposited and form false membranes on the mucous membrane of the larynx.
The false membranes, beginning in the larynx, may extend from there to the pharynx.	The false membranes exist at the beginning of the disease in the pharynx, and extend from there down to the larynx, and frequently up into the nose.
Affects children only.	Attacks adults also.
Begins mostly suddenly, at midnight, with croupy cough, etc.	The child has been ailing 3 to 5 days before croupy symptoms appear.
The child loses its strength only after frequent vomiting and towards close of the disease.	The child becomes weak from the very beginning, and loses strength rapidly, even before appearance of croupy symptoms.
Never any constitutional symptoms except high fever (symptomatic of the violent larynx inflammation) and near death, symptoms due to want of oxygen.	Constitutional symptoms from very beginning, moderate fever long before laryngeal symptoms, and child dies often from septicæmia before death by suffocation sets in.
Never any complications.	Often nasal diphtheria, sometimes endocarditis, always septicæmia.
Albumen in the urine only after dyspnœa has become great.	Albumen in the urine from the very beginning of graver symptoms.
Never enlargement of glands.	Enlargement of glands from very beginning, and never absent.
Never contagious.	Very contagious.
Never followed by any sequelæ.	Frequently followed by local and general paralysis.
Rapid convalescence.	Very slow and tedious convalescence.
False membranes soluble in potash solution, hardening in sulphuric acid.	False membranes soluble in sulphuric acid, hardening in potash solution.
Membranes consisting of new formation of cells.	Membranes consisting of masses of bacteriæ and cells.

Gentlemen, these differences are not the result of artificial work, but they appear in every case of either disease, and are taken from nature; and I hope that I have convinced you that membranous croup and laryngeal diphtheria are by no means identical, but totally different diseases, distinct from each other. And let me impress upon you once more the fact, that while the former is a local, the latter is a constitutional, infectious, contagious disease.

Communications.

THE RATIONAL TREATMENT OF BLENNORRHŒA.

BY GEORGE H. PICARD, A.M., M.D.,
Of Topeka, Kansas.

In those cases of long continued and persistent gleet occurring as sequences of blennorrhagia, or any other acute urethral irritation, depending upon a structural alteration of some portion of the urethral lining, the surgeon is not unfrequently humbled; indeed, it is proper that a certain degree of humility should attend the undertaking of one of these cases, which has most likely been a *bête noir* to many an unsuccessful *confrère*.

The pathology of the disorder is confessedly obscure. Some radical surgeons teach that every gleet depends upon a stricture more or less developed; it may be so slight as to have escaped observation. Such gleets are undoubtedly common enough, as is shown by their gradual disappearance during dilatation. It will be found, however, that a large proportion of gleets do not yield to dilatation or mechanical compression. In these muculent fluxes there seems to exist a condition analogous to the chronic and passive congestion of the gynecological phenomenon known as hyperplasia. The lesion, which consists essentially of structural change, is situated in the prostatic urethra, and if undisturbed, is likely to involve the prostate gland and even the vesiculæ seminales.

For my part, I confess that I am unable to differentiate—without historical aid—between the fluxes which accompany the hyperæsthetic state of the urethral lining in masturbation and excessive venery, and the phenomenon known

as ordinary gleet. The microscopic appearance is identical, excepting, perhaps, a greater evidence of ulceration in the gleety discharge; in advanced gleet there is the same presence of scaly epithelium and prostatic cylinders, showing hypersecretion of the glandular surface.

It seems to me that there exists no important difference in the etiology of these fluxes; the chronic discharge of blennorrhœa is caused by the injury done the mucous membrane by the intense irritation of blennorrhagia, rather than any specific violence inflicted by the virus; the fluxes of masturbation and imaginary spermatorrhœa are the result of habitual genital excitement.

If the pathology of these phenomena is identical, it would follow that the same treatment would be successful in both forms. This conclusion would be rational were it not for the fact that in masturbation the continuation of the habit affords a constant supply of fresh irritation, a condition which obviously does not obtain in blennorrhœa. If, then, the surgeon could be assured of the absolute reform of his patient, he might proceed accordingly.

I believe that more cases of obstinate and long-continued gleet have been cured by Lallemand's method than by any other means; yet the procedure is a severe one and by no means devoid of hazard. There is no especial use in disguising the fact that modern conservative surgery looks unkindly upon the employment of the caustic.

Some months ago, in consequence of the satisfactory results I had already obtained from the use of hot water urethral irrigation, both in prostatorrhœa and passive seminal fluxes, and also influenced by the pathological analogy existing between these disorders and blennorrhœa, I determined to employ the thermic agency in the treatment of the latter. Thus far my success has been very gratifying. *In no instance has the scheme failed to yield a radical cure.*

The plan I pursue is simplicity itself, and may be briefly described as follows: A small-sized, bulb-tipped catheter, having lateral openings, is to be inserted into the portable urethra, so that the bulbous extremity will occlude the mouth of the bladder; the free extremity of the catheter is to be connected with a rubber tube which is attached to the faucet of an elevated vessel containing the water; the water is thus, by the force of gravity, thrown into the urethra, and after being distributed over the desired surface, finds a ready egress through the ample space left in the urethra by the small catheter. No fears need be entertained that any injury will be done to the bladder; it is not likely that any water will pass the close-fitting bulb, certainly not sufficient to light up any inflammation.

To insure complete success, this treatment demands the strict observance of the same conditions that are laid down in vaginal irrigation—perseverance, frequency and conscientious regard for details. I begin with water at a temperature of 90° F., which I increase as rapidly as tolerance can be established, to 100 or even 115° F. At least two sittings of fifteen minutes each should be daily required of the patient. The temperature of the water should be maintained by frequent additions from a vessel of boiling water. If any more active stimulation is desired than is afforded by the hot water alone, or if an increased sedative or alterative action seems necessary, it may easily be obtained by medicating the water. I have found the hot water sufficiently alterative.

It may seem presumptuous for me to call this a *rational* treatment, when it is remembered that so little is yet really known of the pathology of these lesions; but I trust that I may at least seem less empirical than the advocates of nauseous anti-blennorhœtics.

In conclusion, I will add a brief record of three cases recently cured by this method:—

Case 1.—W. T., American, aged 21, first contracted blennorrhagia two years ago. I treated him for an acute orchitic testicle, and afterwards for a muculent discharge, which, in spite of my best efforts and a complete exhaustion of the conventional medical and surgical resources, persisted until six weeks ago. At last, being thoroughly disgusted with the non-efficacy of tonics, stimulants, sounding, etc., I began the hot water treatment. After two weeks the discharge disappeared, and has not returned, although four weeks have elapsed. A remarkable feature of this case is the constancy exhibited by the patient; it is easily accounted for when I confess that for three-fourths of the time he was an inmate of a charitable institution of which I have the medical charge.

Case 2.—P. M., Irish, aged 25, first contracted blennorrhagia and chancroid eighteen months ago. In due time the chancroid healed, but the flux continued. Has had the services of seven physicians during the past year, without perceptible change in the gleet. After two weeks of the hot water treatment the discharge ceased, and has not returned after four weeks.

Case 3.—T. T., American, aged 16. In spite of the tender age of this patient, he contracted blennorrhagia nearly two years ago. On account

of excessive shame, he had no treatment for the acute period, but suffered in silence until he began to be alarmed at the long duration of the discharge. I employed the hot water treatment for three weeks, and there has been no sign of a return of the difficulty for two months.

In all of these cases I used, as an adjunct, the hip bath, as hot as could be borne, but no medicine of any kind. In two other cases in which I also resorted to urethral irrigation, with perfect success, I prescribed minute doses of atropia.

SOME POINTS IN REGARD TO TROPHIC NERVE CELLS.

BY J. S. WIGHT, M.D.,

Professor of Surgery at the Long Island College Hospital.

Written for the MEDICAL AND SURGICAL REPORTER.

It is a fact of primary importance, that some nerve cells and muscle cells are co-related. If the muscle cells, from any cause, have no nerve cells to act on them, they will atrophy and degenerate; and if the nerve cells, from any cause, have no muscle cells to act on, they will *probably*, in time, atrophy and degenerate. These remarks are made in regard to the motor nerve cells connected by nerves with both voluntary and involuntary muscle cells. So that if we impair the function of the nerve centre of a muscle, we impair the function of that muscle; and if we impair the function of a muscle, we in a certain sense impair the function of its nerve centre. Of course, an impaired muscle, as well as an impaired nerve centre, may be repaired—to a limited extent—entirely, or not at all. The co-relation spoken of may be more regarded in the light of anat my than physiology. But physiologically and physically, however, there is a *cor-relation* of *energy*. And there can be no doubt that the avenue of correlation is the axis-cylinder. The molecular activity of the nerve cell acts on the molecular structure of the muscle cell, and the molecular activity of the muscle cell reacts on the molecular structure of the nerve cell. The energy of the nerve cell that is transmitted along the axis-cylinder is correlated into part of the energy of the muscle cell—perhaps a very small part—and the resultant coming from the combination of nerve work and muscle work, being muscular contraction and the expression of neuro-muscular work; and the energy of the muscle that *reacts* along the axis cylinder is, as it were, correlated into a certain part of the special energy of the nerve cell, the resultant coming from the combination of muscle work and nerve work, and what we call nerve function, being really the expression of musculo-nerve work. There are two factors, and they coöperate. Instead of motion being accomplished by means of one cell, it is accomplished by the coöperation of two cells. There is, so to speak, a division of labor, a differentiation of work, and while it is admitted that the nerve cell communicates motion, a kind of liberating motion, to the muscle cell, it does not seem so clear that the muscle cell communicates any motion to nerve cell, and yet the conclusion must be reached that the muscle cell *reacts* on the nerve cell, so that there is a most intimate dynamic relation between these cells, that is, the nerve cell and the muscle cell.

This assumption is, as it were, based on the well known law of mechanics, that action and reaction are equal; and if there be no reaction of a molecular kind in the case under consideration, there is still an opportunity for such a reaction, and what is more to the point, perhaps, if the nerve cell has no muscle cell to act, its legitimate action and discharge of work cannot take place.

The health and integrity of the muscle cell, and so far its nutrition, depend on the health and integrity of the *motor* nerve cell; and the health and integrity of the *motor* nerve cell, and so far its nutrition, depend finally on the health and integrity of the muscle cell. The molecular activity of the muscle cell is thus related to the health and integrity of the nerve cell, and the molecular activity of the motor nerve cell is thus related to the health and integrity of the muscle cell.

Now, is it not true, that the muscle cell is a special—a *differentiated*—cell? Say, in a sense somewhat analogous to the fact that the liver cell is a special—a highly differentiated—cell. And can the statement be contradicted, that the liver cell is co-related to the nerve cell, and that the molecular activity of the liver cell and the nerve cell are *cor-related*? I think we need not be detained on this point. But we may add, that the special function of the liver cell and the nutrition of the liver cell are so intimately related, that they must go on together. Hence, to disturb the nerve cell, that is co-related and cor-related to the liver cell, is to disturb, not only the function, but the nutrition of the liver cell. On the other hand, to disturb the nutrition and function of the liver cell, will disturb the function and the nutrition of the co-related and correlated nerve cell. Do not diseases of the liver cause hypochondria? Do not some kinds of mental emotion cause disturbed conditions of the liver? But the liver is not

an organ for making muscular motion—it is an organ where the motions of nutrition take place. It is an organ where molecular motions do not eventuate in molar motion. Nevertheless, it is an organ that is co-related and correlated to the nervous system. Again, there are two factors, and they coöperate. The function of the liver cell is the resultant of a combination of transmitted nerve action and a certain quantum of associated liver action. The liver is a consociated and a dependent organ, having a copartnership with the nervous system; especially the ganglionic system. And if the ganglionic system had no work to perform, it would, in time, atrophy and degenerate.

If we are permitted to reason by comparing facts, and by analogy, we must come to the conclusion that other specialized cells of the body are also co-related and correlated to the nerve cells. Take, for instance, the cells of the connective tissue in various parts of the body. The connective work and the frame work performed by these cells is to some extent correlated with the nerve work of some of the nerve cells. Why should a muscle cell and a liver cell be connected dynamically with the nerve cells? And why should the connective tissue cells be cut off from any dynamic relation with nerve cells? There is no reason why in nature this should be so. There is no reason why the principle of differentiation for special work should not hold good for a dynamic relation between a connective tissue cell a nerve cell, as well as between a muscle cell and a nerve cell, and as well as between a liver cell and a nerve cell.

To be sure, the relation between a muscle cell and a nerve cell is more apparent than the relation between a liver cell and a nerve cell, and far more apparent than the relation between a connective tissue cell and a nerve cell, simply because molar motion is more tangible than molecular motion. Yet, I think the facts of nutrition as involved in molecular activities, and as dependent on the influence of nerve cells, may with some degree of success be elucidated and illustrated. I think it may be somewhat conclusively shown, that the nutrition of various parts of the body depends more or less on some of the nerve cells.

It is not to be supposed that every cell, other than a nerve cell, is directly connected with a nerve cell: It may, however, be supposed that groups of special cells are connected with special nerve cells; for instance, a nerve cell is dynamically related to a group, more or less extensive, of special cells, such as muscle cells, liver cells, or connective tissue cells. The small mass of the central part of the nervous system is in favor of this supposition. Suppose, to illustrate, we had an army with a general to every private; what would it be good for? Too many generals would be as bad as none at all; but subordinate commanders, having a group of men under each, would be useful: And this seems to be to some extent the practical relation of the nerve cells to the other special cells of the body.

As if to strengthen this view, it would appear as if the ganglion of the posterior spinal nerve root were an aggregation of nerve cells, and that these nerve cells are in co-relation, and in correlation with the ectodermic cells. At any rate the integrity of the ectodermic cells is connected with the integrity of the ganglion cells, and the integrity of the ganglion cells bears some relation, perhaps, to the integrity of the ectodermic cells to which they are anatomically related; and more than this, the sensory impressions must pass through these cells on the posterior spinal roots; and this shows that the nerve cells proper have the power of conducting impressions, and it also shows, that the function of conductivity is *complemental* to the normal nutrition of the nerve elements, just as the function of contraction is *complemental* to the normal nutrition of muscle elements. Now, the nerve cells of these spinal roots are very few, when compared with the great number of the ectodermic cells, and yet they are competent to preside over the cells of the ectoderm, although it must be admitted that each nerve fibre is co-related to a group of ectodermic cells.

At the same time, it must not be forgotten that the correlation extends to the spinal cord, where there are cells of coördination, reflexion, and conduction, as well as the cells of mechanical motion and the cells of nutrition. But it is with the cells that affect nutrition that we are at present chiefly concerned. For the existence of such cells we have already brought forward some general reasons that appear to have considerable weight. But nowadays the reasons of experiments go far in the direction of convincing men who will not listen to any other reasons. Have we any experiments in regard to the existence of nerve cells that are co related and correlated with the nutritive work of any ceils of the body? I believe we have some experiments in the form of accidents that have happened to the human body. In other words, certain accidents may take the place of experiments.

The third fatal case of gunshot wound of the

spine reported on page 431 of the *Surgical History of the War of the Rebellion*, reads as follows:—Lieutenant George C—, 24 years of age, was wounded, July 9th, 1864, by a conoidal ball, which entered the anterior part of the neck, immediately to the left of the thyroid cartilage, passed through between the roots of the seventh and eighth cervical nerves, and emerged between the spinous processes of the seventh cervical and the first dorsal vertebræ, a little to the left of the neck. Simple dressings were applied. By August 4th the wounds of entrance and exit had entirely healed. *Large bed-sores had formed on the back, arms, and legs.* There was entire paralysis, with involuntary discharges of urine and fæces, and a profuse diarrhœa. The patient died from exhaustion, on August 12th, 1864, thirty-six days after the injury. The autopsy revealed a slight effusion of blood between the membranes and the cord, on the right side and external to the membranes, on the anterior part of the spinal cord. *There was no direct injury to the cord.*

I may draw attention to some significant points in regard to the case whose history I have just transcribed and paraphrased:—

(1) The most significant point is a fact that the reporter has accidentally omitted: It will be seen from the accurate description, that the ball must have destroyed the lower left sympathetic ganglion, because this ganglion lies in the path the ball followed in its passage through the neck. Of course, the function of this ganglion must have been destroyed also. But it must be kept in mind, that the lower sympathetic ganglion of the neck is organically connected with the cilio-spinal axis, whose function must have been affected by the damage done to the neighboring ganglion. And it may be remarked that this damage probably consisted in the disturbance of the correlation between the cilio-spinal axis and the lower cervical ganglion. So that we may say that the cells of the cilio-spinal axis were in a state of intense irritation.

(2) The vertebræ were not injured by the ball, and so there was no direct injury to the cord; and yet there was entire and notable paralysis, as we understand from the report, of the parts below the seat of the injury. This shows that the cord was seriously damaged, and explains the loss of voluntary motion.

(3) The nutrition was extensively disturbed, since there were bed-sores on the back, arms, and legs. Now what was the cause of this disturbance? Did it reside in the sympathetic ganglion, which was the chief structure injured? Did it reside in the cilio-spinal axis, which was indirectly injured on account of the injury to consociated nerve cells? Or, did it reside in the co-ordinated functions of both sets of nerve cells—the cells of the cilio-spinal axis and the cells of the lower cervical sympathetic ganglion? Without formulating an opinion on this important subject just now, let me call attention to the significant facts that voluntary motor impulses are intimately connected with the cells of the cilio-spinal axis, and that *in*voluntary motor impulses are intimately connected with the cells of the sympathetic ganglion. Let me go a step further, and point out the remarkable fact, that voluntary motion and involuntary motion are practically combined in the procuring and digesting of food. Hence, the spinal and sympathetic nerve cells are consociated in the antecedent steps of nutrition. May they not be consociated in the subsequent steps of nutrition? In the metabolism of the protoplasm?

(To be Continued.)

Hospital Reports.

HOSPITAL OF ORAL SURGERY.

CLINIC OF PROF. GARRETSON.

Neuralgia.

Gentlemen:—To treat neuralgia scientifically, is to recognize that the meaning of it is pain arising out of a cause; is to make discovery of the cause and to remove it.

Case 1.—Mr. E, aged 60. The case before the class is one of peculiar interest. Six months back I diagnosed a lesion existing in the nerve canal of the lower jaw. The canal was opened and a spicula of bone discovered growing directly across it; the nerve was found jagged, tumid, and broken down in places. The general health of the patient was miserable, as the result of the pain suffered and the opiates taken to relieve the pain. The diseased nerve was thoroughly removed.

The pain is back. The patient insists that he feels it at the original seat. You think it cannot be so situated; that the perception is akin with that which feels pain in a toe that weeks before was buried with an amputated leg. Of this last I am not at all sure. I am in doubt as to whether there are not cases in which the mylo-hyoid nerve perforates the bone.

In the case of the patient before us, one thing is incontrovertible; there is pain; pain so severe that it is not to be endured. There is another fact; the lesion is associated strictly with the third division of the trifacial nerve. Considering the exhausted state of the patient, I shall this morning perform a radical operation. I propose to make a section of the nerve where it appears at the oval foramen. I shall also exsect the jaw. I combine these performances after full consideration. If, in what to-day is done for the case,

relief does not follow, it will never be brought about. I have studied the case pathologically and psychologically; I commit myself to the prognosis given.

Operation.—The operation done combined exsection, both of jaw and nerve, and was performed as follows: The patient being etherized, an incision divided the lower lip in its exact median line. Ligatures were placed about the two coronary arteries. Next, a second incision, beginning with the termination of the first, was carried along the shade line of the under surface of the jaw, extending backward and upward, until the zygoma was reached; the facial artery was here tied. A succeeding step dissected the soft parts from the face of the bone, the masseter muscle being lifted from the ramus. Free exposure thus secured, the operator proceeded to remove the bone, after a manner devised by him, of having a rim of continuity and preserving the inner layer of periosteal structure, the latter to be used in covering the seat of section.

In the bone operation the surgical engine is used, the cutting instrument being a circular saw revolved at the rate of at least ten thousand revolutions to the minute. First, an anterior cut was made, commencing from the socket of an extracted lateral incisor tooth, and extending inward to the periosteum, and downward until but a quarter of an inch remained undivided. Second a similar cut was made across the lower face of the ramus. Third, the widely separated cuts were united by means of another carried from behind forward along the base of the bone. Fourth, the section was thrown inward, and the periosteum worked off by means of a chisel shaped knife. This completed the jaw section.

Commencing the second operation by grasping the exposed inferior maxillary nerve with the teeth of a bulldog forceps, the saw of the engine was replaced by an oblong burr, three-quarters of an inch in length by half an inch in diameter. With this burr in rapid rotation, the bed of the nerve was quickly scooped out until the exit from the posterior dental foramen was exposed. Pursuing his new method, Prof. Garretson enlarged the foramen until freely exposing the pterygoid muscle. The nerve, put on the stretch, was lifted from its bed and protected from all its immediate relations in the zygomatic fossa. The conclusion of this part of the operation consisted in passing through the enlarged foramen the blades of a pair of delicate scissors, and in nipping the nerve off just below the oval foramen.

The wound being permitted to remain exposed until a reasonable glaze was secured, the closing commenced by stitching the periosteum over the face of the cut jaw, and next, in accurately adjusting the separated lip and cheek.

So rapid was the process of cure, that the patient left Philadelphia for his home in a distant city, in just thirteen days.

No neuralgia has since troubled him.

Fistula Beneath the Chin, of Four Years' Standing.

Case 2.—The lady before you has, you see, a little sore beneath the chin, a trifle to the right of the median line; this sore has persisted, in spite of much treatment, for a period of four years.

A sore, to defy direct treatment, must have something as a support back of it. This sore, I am sure, has something back of it. I have met, in my experience, with many looking like it, but never one where a directly immediate medication applied to its face could, by any possibility, amount to anything in the way of cure. A moment and you will understand this.

The sore before us is the outlet of a fistulous track. It is not at all a thing having meaning in itself; it exists in some other thing, for which we at once proceed to make search.

With this silver probe I enter the fistula; it leads, as I presumed we would find, directly to the bone. Here we may pass to the mouth. The patient wears artificial teeth, full sets above and below. Removing the lower set there is nothing of unhealthy character to be seen.

I commit myself, gentlemen, by saying that I have never met with a fistulous sore like the one before us, where a tooth, or the root of a tooth, was not at the bottom of it. If here there is found no dental origin, I have to note my first exception.

Confident in my experience, I make a cut along the gum. I dissect the gum from the bone. Convict me, if you please, for a mistake. I confess I never exposed a healthier looking bone. I dismiss the patient that the wound may heal; you shall see the lady later.

* * * This is the patient who, as you will recognize, seemed to convict us of a mistake a few days back. To-day we are to clear up the matter. Ten years back, as I have learned, an operation was performed on this jaw by an eminent surgeon of a distant city, for cure of the condition as we here find it. The bone was exposed and scraped. The result was nil.

The patient being etherized, I make a cut along the shade-line of the neck, directly to the jaw. Let us dissect away, for a little distance from either side of the fistula, the overlying tissue. * * Here is health again, nothing but health. The facial side of this jaw bone is perfect. I will, with extreme delicacy, expose a little of the neck aspect. Here is a small hole. I stick a steel pin into it to make the location. This hole leads to the meaning of the external sore. What I shall do, is the only thing to be done. I shall follow the lead of the hole and see where it goes. Please note how I shall follow the lead. I pick up the penholder-looking instrument, which you all know as the hand-piece of our surgical engine. My assistant, as you see, has armed it with a burr. Now we will put it in motion. It appears as still as though it were lying untouched upon the table, yet at this moment the burr is making ten thousand revolutions to the minute. It is an instrument of magical delicacy. See what it can do, and how it does what it can do.

Operation.—With a few touches, as one would manage a pen, the opening was enlarged, the bone falling into a mass of carious detritus composed of the cancellated structure of the bone. The inside of the jaw, for quite an inch to either side of the hole, was completely broken down. Among the patches removed by the burr, the apex of a tooth root was found.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINIC OF LOUIS A. DUHRING, M.D.,

Professor of Dermatology.

Reported by FREDERICK A. TAYLOR.

Eczema Rubrum.

CASE 1.—This case is that remarkable one of universal eczema rubrum, which has appeared on several occasions in this clinic since last spring, when it first entered the hospital. The boy, you will remember, is about eight years old, and has been afflicted since the first year of his life. The disease, as you see, covers every portion of his body, from the crown of his head to the soles of his feet, and to the ends of his fingers. He appeared before the clinic last week, at which time the treatment which he has been undergoing was somewhat modified. For the month previous he had been taking Fowler's solution of arsenic, beginning with small doses, which were gradually increased, until at one time he was taking four minims. This was finally reduced to two minims, the dose upon which he appeared to do best. At the same time he was receiving a mild external treatment, consisting of an ointment made up of equal parts of zinc oxide ointment and cosmoline.

Under this treatment he improved. Last week the arsenic was discontinued, and he was placed on cod-liver oil in increasing doses, also using the oil externally by inunction. I bring him before you to-day to show you the somewhat disappointing result. The redness, you see, has noticeably increased since last week. On the scalp and elsewhere have appeared numerous small, flat pustules. He says he does not feel so well, nor sleep so well.

This treatment, while it answers in some cases, has failed in this instance. We will return to the ointment we were using, but continue the cod-liver oil internally. We will also supplement the treatment by the use of alkaline baths. The ointment will be applied twice daily, and he will appear before you again, that you may see the result of the treatment.

CASE 2.—The patient, a young man twenty years of age, has been suffering from diffused chronic eczema rubrum for nineteen years. He has been in the hospital and under treatment for six weeks. The treatment now consists of the application of the oil of cade to the more infiltrated parts, followed by an ointment of equal parts of zinc oxide ointment and cosmoline. He is anæmic, and is taking tincture of the chloride of iron and quinia internally. He has appeared in the clinic before, and is steadily improving.

CASE 3.—The next two cases illustrate two varieties of eczema. This man presents a marked case of eczema rubrum occurring around the ankles, accompanied with excessive itching. He has been here before, but it was some time ago; dispensary patients are often exceedingly difficult to treat, on account of the irregularity of their appearance. When we saw him last, we prescribed an ointment consisting of thirty grains of calomel to the ounce of zinc oxide ointment, and the disease has improved. We will continue this treatment a week longer, when he may be able to tolerate the use of tar ointment, which will then be substituted.

Eczema Papulosum.

CASE 4.—This young woman appeared at the dispensary three days ago, with a papular eruption on the back of the neck, from the scalp to the shoulders. The skin, you see, presents a dusky reddish surface, is thickened, and is covered with small, ill-defined papules, showing plain evidence of scratching, a point to be noted in making the diagnosis. She has had the disease five months. It is clearly a case of papular eczema.

She has used a saturated solution of boracic acid for three days, which she says has stopped the itching. She will continue the use of it another week, when we will see her again and probably order an ointment of tar, a drachm to the ounce.

Eczema Squamosum.

CASE 5.—This little girl also appeared before the clinic last week. She presents patches of squamous eczema on the side of her face, and also on other parts of the body. In making the diagnosis of this disease, it is to be differentiated carefully from tinea circinata, for which it might easily be mistaken. Squamous eczema is characterized by variously sized and shaped, dry, reddish patches, which are more or less scaly. In distinguishing this disease from tinea circinata it must be remembered that eczema has no tendency to assume circular patches, while tinea circinata has. The edges of the patches of eczema rarely terminate abruptly, while those of tinea circinata generally do. Moreover, eczema tends to become chronic, while tinea runs a rapid, progressive course. In all cases an appeal to the microscope will always decide the question, by showing the presence or absence of the fungus.

As the child is of delicate constitution, spare and pale, and has been troubled with this disease for several years, a constitutional treatment was indicated, and she has consequently been put upon the syrup of the iodide of iron and cod-liver oil. Locally, a white precipitate ointment, twenty grains to the ounce, is being used.

Eczema Rubrum.

CASES 6 and 7.—Here are two middle aged women with chronic eczema rubrum on the legs and feet. The two cases are very similar in appearance. This variety of eczema is most frequently seen upon the legs, appearing in dark red, thickened patches, showing much inflammation, and accompanied with itching. In one of these women the disease also produces a great deal of pain. As she is habitually excessively constipated, she cannot hope for much improvement while that condition exists. We will give her laxative doses, of equal parts of cream of tartar and sulphur, every morning, for a week. Externally, black wash and oxide of zinc ointment have been used, and with benefit. We will now employ, instead, carbolic acid ointment, fifteen grains to the ounce, to be used thrice daily.

Tinea Versicolor.

CASE 8.—In this man you observe over the upper part of the chest a number of faint, yellowish, macular patches, some of which have run together, their surface showing slight furfuraceous desquamation, which is demonstrated by

my scraping the surface with the finger, by which powdery scales are rubbed off. On the upper part of the back the disease is even more marked. This is a typical case of the vegetable parasitic disease, tinea versicolor. The diagnosis of this disease, though very easy, often wins great credit; as for instance where the patient has been receiving treatment for the macular or pigmentary syphiloderm—a not infrequent occurrence.

For the treatment, any of the vegetable parasiticides may be employed, such as baths of potassium sulphide, about two ounces to the bath; sapo viridis, frequently rubbed into the skin; ointments or lotions containing the hyposulphite of sodium, about one drachm to the ounce of ointment or water; corrosive sublimate in the form of a lotion, containing from two to four grains to the ounce. In this case we shall employ sulphurous acid, to be used freely, as a lotion. Before applying any of these remedies, the surface of the skin should be well cleansed with soft soap and water. A cure may be confidently predicted in from three to six weeks; but as relapses are likely to occur, the treatment should be continued for some time after the disappearance of the symptoms.

Case 9.—Here is a man with a formation on the side of the upper lip, which will be very interesting to study. Its appearance, you see, greatly resembles a tubercular syphiloderm. Without history, its appearance alone would scarcely distinguish it from that disease. It appeared about a week ago, having been preceded by some disease of the face which extended from there over the upper lip. Taking hold of some of the stout hairs projecting from the surface, I find that they are very loose, and may be readily extracted without causing pain. This presents the possible error of regarding the disease as syphilitic. In the syphiloderm the hairs are not loosened, as here.

From its sudden development, the absence of the disease on any other part of the body, its first appearance on the side of the face as tinea circinata, and the loose condition of the hairs, the disease is evidently tinea sycosis, or common "barber's itch." This is a peculiar case, in the fact of its location upon the upper lip. I do not recall another case like it. The usual seat of the disease is the chin and neck.

The treatment of the disease consists in the application of strong parasiticides. The hair should be removed from the diseased surface every day. For this patient we shall use as a lotion sulphurous acid in its full strength, three times a day, after which an ointment of the hyposulphite of sodium, two drachms to the ounce, will be rubbed in thoroughly. Our treatment will require two or three months to effect a cure. In the meantime the patient must be warned in regard to the contagiousness of the disease.

Psoriasis.

Case 10.—In the next case, you notice, as the man exposes his arms, that they are nearly completely covered with bright red, coin-sized, rounded, inflammatory patches, some of them running together, covered with large whitish scales. On his legs, as you observe, the disease is even more severe; but the brownish scales which cover the lesions here are not produced by the disease itself, being doubtless due to some ointment which he has been applying. On the body you see the lesions which have most recently appeared; these, you notice, are small, reddish, scaly spots, the scales being distinctly silvery in appearance. It is a typical case of psoriasis. The disease generally appears symmetrically. Since psoriasis sometimes bears a close resemblance to the papulo-squamous syphiloderm, this symmetrical appearance is an important point in making the differential diagnosis; the lesions of the latter disease seldom showing the same tendency to this arrangement.

The case before us is a very acute one. The patient first noticed the disease last August, since which date it has been rapidly progressing. At the present time new lesions are coming out rapidly and abundantly, from day to day. The process is exceedingly active, and constitutes what is known as acute psoriasis. Ordinarily the disease has a much more sluggish course.

We shall advise the use of alkaline baths, and olive oil by inunction, twice a day. In an acute case, such as this, no tar should be used. He will also be ordered to take ten or fifteen minims of the liquor potassæ, well diluted, three times daily, after meals.

Ulcerating Tubercular Syphiloderm.

Case 11.—On this woman's leg and ankle you notice pigmented spots and scars, the results of former ulcerative lesions. Here and there are a few recent ulcers, the size of small coins. The disease is the ulcerative tubercular syphiloderm. The patient, a married woman, forty years of age, has been under my observation for about two years. Mercury and iodide of potassium have been used in various doses. For some time she has been taking iodide of potassium in ten-grain doses, and the biniodide of mercury in one-sixteenth grain doses. This does not serve completely to control the disease. It is often found that when these drugs have been administered together for some time without success, great benefit may be obtained by the use of the iodide of potassium alone, in full doses, from ten to thirty grains. This plan will now be adopted here. There is an interesting fact in the history of this case, to which I wish to call your attention, namely, that six months ago the patient bore a child, which was perfectly healthy and remains so to this day, having never exhibited any syphilitic indication. The anti-syphilitic treatment to which the woman has been subjected for the past two years has doubtless had an effect on the child *in utero*.

Medical Societies.

RHODE ISLAND STATE MEDICAL SOCIETY.

The Annual Meeting of this Society was held in Providence, in December. Dr. C. V. Chapin read a paper on

Malarial Fever,

its cause, effects, and treatment. Dr. Chapin said that the recent appearance of this form of disease among us has given rise to the inquiry as to whether it has at any previous period of our his-

tory been prevalent in New England. Oliver Wendell Holmes, in 1836, said, in an essay, that intermittent fever existed in this section to a moderate extent until the early part of the present century. It occurred, at the time of the Revolution, in Providence, Cranston, and South Kingstown, while other parts of the State escaped. Dr. Mauran, in his early practice, is said to have met with cases of the fever in the north part of this town, and Dr. Usher Parsons knew of cases near a dam which had been built across the Moshassuck river; but for the last fifty years Rhode Island, together with the most of New England, has had complete immunity. About twenty-five years ago, however, malarial disease began to spread eastward from the Hudson, and crept slowly along the coast of Connecticut. In this way the Connecticut and the Thames valleys, as well as those of smaller streams, have become very malarious. New London was visited by the disease in 1878, and Rhode Island was prophesied as the next to suffer.

In 1880 a case appeared at Nayatt, and many others were soon after reported. A few cases also appeared in Providence, all in the vicinity of Mashapang pond. During the past summer a very large number of cases appeared. Of seventy-four physicians, thirty-one reported having cases under treatment, some having a large number of cases; in all about 300 cases were reported. Of these about 187, or 60 per cent., were within half a mile of Mashapang pond; 26 were near the Orient mill, and 8 near the Red bridge; 79 were scattered all over the city. Not a single death occurred within the city limits. The record is very imperfect, and there were probably many more cases which were not reported. Various theories have been advanced, but now the bacterian germs of our enthusiastic German friends are made to bear the blame. The theory of meteorological influences has been dispelled by actual experience.

The disease is often extremely local, and seems capable of being transmitted to a distance by wind or water, the direction often being varied by natural objects, such as trees and hills. Some attribute its existence to electrical disturbances, and others to an excess of ozone. As before mentioned, the fact that these diseases often are such very local endemics would seem to establish this; and additional facts, that the same seems transportable, that the disease has a period of incubation, and that it yields to a specific remedy, is enough to establish without question that malarial affections are caused by some ponderable specific poison.

The Doctor then gave an extended account of several experiments looking to the artificial transmission of the fever to the lower members of the animal kingdom, by injections of swamp water impregnated with bacteria. Also the conditions of the locality conducive to the generation of malarial influences. He closed with a recommendation that the health authorities of the city effect the drainage of the Mashapang pond district, or so arrange that the low-lying districts be permanently covered with water.

THE DISCUSSION.

Dr. H. G. Miller reported several cases of ulceration of the eye, resulting from malarial poison, all of which, after continued treatment, recovered with but little permanent damage to the organ.

Dr. Remmick, whose practice is in Elmwood chiefly, referred to the number of pronounced cases of chills and fever in that vicinity.

Dr. Wm. Shaw Bowen, of this city, reported a unique case of paralysis of the adductor muscles of the larynx, causing complete loss of the voice, that was undoubtedly the result of malaria. The patient had been suffering from chills for some time previous. The voice was recovered after continued treatment with quinine and salicylic acid.

Dr. Batchelder, of Arlington, described his remarkable experience with the results of malaria in his vicinity. He has treated nearly 200 cases of well-marked chills and fever, nearly all of which were on the low ground at the foot of Arlington heights. He combated the theory of the unhealthiness of Mashapang pond, thinking it a libel on that well known place, but admitted Spectacle pond to be partially surrounded by low, swampy ground, that may produce the disease. Dr. Batchelder's remarks were very interesting, and his experience with the disease has been very great.

Several other papers were read, among them being one by Dr. Geo. A. Brug, reporting a case of unusual tolerance of sulphate of morphine. The patient had used morphine for fourteen years, taking it first for relief from pain. Of late she had taken as high as 80 grains between two and five o'clock, P.M. She is now out of danger.

Editorial Department.

Periscope.

Progressive Atrophy of the Skin.

The *Progrès Médical* (Oct. 29th, 1881) reports that in a clinical lecture, published in *il Morgagni*, Mr. Cantani called attention to a cutaneous lesion for which he could find no analogy in medical literature, and which he designated under the name of *Progressive Atrophy of the Skin.* The case was that of a youth of 20 years, strong, tall, and of good general health, without any nervous or syphilitic history, and who had never indulged in excess of any kind. His attention was first attracted by an enlargement of the right testicle, which, however, gave him no pain, except when horseback riding. A few months later, he noticed the appearance of streaks (vergetures) on the abdomen and over the right inguinal region. These wrinkles or streaks gradually extended up and down, until, at the end of a year, they appeared over the

whole anterior surface of the abdomen, below the umbilicus, and over all the anterior face of the thighs and knees; they also spread over the popliteal regions, and over the lumbar region, where they formed a broad belt; they also appeared at the angle of the right scapula, and over and around the upper part of the arms. Those streaks greatly resembled those produced by an exaggerated distention of the skin; they were not entirely white, but had a bluish red cast. Over some parts where these streaks did not show themselves the skin had a varicose appearance. Prior to this alteration of the skin, the patient had not lost flesh; but after its appearance, the upper portion of his body, the thorax, neck, and face grew stout, while the lower extremities suffered loss.

He also complained of weakness, and when examined he had not had an erection for over two months. Sensibility in all its forms had remained normal. The scrotum showed peculiar conditions: To the left, a varicocele had developed, and the testicle on that side was atrophied; the right testicle also showed signs of approaching atrophy.

The origin of those streaks cannot be attributed to any great distention of the skin preceding a rapid falling away in flesh, because the patient was never obese, and the emaciation of the lower extremities was not very marked; besides, similar streaks appeared over the upper part of the body, where the skin had undergone quite the opposite process. Mr. Cantani compared these lesions to progressive muscular atrophy, and connected them with an analogous medullary lesion.

Mr. Charcot called attention to the following two cases observed at the Salpêtriére, and which bear some analogy to the preceding case.

Case 1.—X., thirty years old, an engineer by trade, and of very excitable disposition, had always, until lately, enjoyed good health; he was in fair flesh, and had not lost in weight. Within the last two or three months he had difficulty in walking; his legs were weak, and he could hardly bring his thighs together; it seemed as if there existed, on both sides, some contraction of the glutei medius and minimus. The lower limbs showed some emaciation, but electrical examination revealed no signs of muscular atrophy. The tendinous reflex in all the limbs was somewhat exaggerated. There were no troubles of sensibility, nor anything particular about the genitals. While examining him, our attention was attracted by streaks having the appearance of small, elongated scars, from one to two millimetres in width. They were of a whitish hue, and around them the pigmentation of the skin was deeper; they formed a slight ridge, and, owing to this and to their color, they bore some resemblance to the cicatrices from scarified cups. Those streaks were very numerous in the lumbar region; they followed a horizontal or oblique course, forming a sort of belt; others appeared, extending over the buttocks in a longitudinal direction. Some could also be seen about the groins, but here they were more faint and less numerous. The patient had always been in fair flesh, and had not noticed when these streaks first showed themselves.

Case 2.—Miss L. presented herself at the consultation on June 8th, 1881. Her troubles dated some three years back. She first experienced continuous pain on the top of the head, radiating to the right and affecting the right ear. Those pains still continued. About a year later, in 1879, pains supervened in the left instep and knee; there was some swelling, and the attending physician declared there was an effusion in the knee.

Since four or five months she had periodical attacks, which came on twice daily, at noon, and toward five o'clock in the evening. These attacks were in the form of a loud cough, resembling a bark, which repeated itself uninterruptedly during a space of from fifteen to twenty minutes. The attacks were generally preceded by a slight hysteric cough, but at times they suddenly came on with the barking cough. There were no convulsions nor fainting fits. The menses were regular.

On examination, the left ovarian region was found painful, and reduced sensibility existed on that side; there was no achromatopsy; marked hyperæsthesia existed over the nape of the neck and the dorsal region along the median line; also on the left side, around the knee, and the tibio-tarsal articulation; these articulations had, anyhow, remained painful, and the patient could only walk with great effort, and on the tip of the foot, the knee being flexed.

This young girl was in good form, had suffered no emaciation, nor had her growth been over rapid. She was accompanied by her relatives and family physician, and we had satisfactory evidence that no distention of the abdomen had ever taken place. For a year past, she had noticed that on her breasts dark lines appeared, which gradually became paler. Examination revealed the presence of radiated streaks converging toward the nipple, around which they appeared in greatest number. Some seemed of more recent date, and were brownish, or of a bluish red. These were two to three millimeters in width, while others, of a dead white, were narrower. Similar streaks appeared over the lumbar region, and the upper part of the buttocks, but none could be found over the abdomen, in the groins, or along the thighs.

The streaks noticed in both the foregoing cases are not located like those caused by a distention of the parts. As a rule, their position might lead us to suppose they were due to pressure from the clothing, or to corrugations or wrinklings of the skin, consequent on movements of the body; but this traumatic origin can only be accepted, if we admit the existence of a peculiar lack of resistance in the skin of such subjects, since like causes have not a similar effect upon the great majority of persons.

Must we here look for some peculiar trophical trouble resulting from a condition of the nervous system, or due to a coincident congenital lack of resistance on the part of the skin? This is a question which, we believe, cannot be decided by a limited number of examples, especially as the history of streaks (vergetures) in general, and in particular their pathogeny, has been but very little studied, except in cases of rapid distention, or growth.

On the Removal of Foreign Bodies from the Ear.

In a paper on this subject, published in the *Medical Record*, Dec. 10th, 1881, Dr. D. B. St. John Roosa, says:—

If you chance to be in the woods with a friend into whose ear an insect has entered, the simplest method of removing it is to pour in some water, warmed by the hand, until the insect can be dislodged. When flies and maggots gain entrance to suppurating ears, the case is one for simple treatment with the syringe, first using some agent which will kill the fly or maggot, such as carbolic acid, Labarraque's solution, or the like; after this, the stream of warm water may be employed. An attempt to remove them with the forceps only makes them more lively and increases the difficulty of their removal. Fortunately, with the advance in our knowledge as to the methods of examining and treating the ear, these cases of maggots entering a decomposing mass deep in the canal are very rare.

With regard to other foreign bodies, as peas, cherry stones, etc., he says:—

Do not be excited when a patient is brought to you who is said to have a foreign body in the ear. Never believe that there is a foreign body in the auditory canal until you have seen it with your own eyes, if you are the person who is to remove it. Take no man's, take no woman's, take no nurse's, take no person's word for this. Very bad results have occurred from the neglect of what seems to be a fundamental proposition. Ears have been syringed—much worse, have been treated with instruments; membrana tympani have been broken, ossicles have been dragged out, labyrinths have been invaded, and meningitis and death have been caused, by neglect of this simple rule. In other words, attempts have been made to remove foreign bodies from the auditory canal when there were none there.

First, then, be sure that there is a foreign body in the ear. Second, remove it by syringing, if possible. Third, wait quietly, if it is so wedged in that it cannot be removed in this manner, until you can procure competent assistance, and then proceed with care and caution, and with such instruments as your ingenuity and the ordinary instrumental collections of aural surgeons will furnish.

Self-Abortion.

The denial, by many authorities, of the possibility of a woman producing self-abortion, has induced Dr. William H. Hardison, of Richland, Ark., to give, in the Louisville *Medical News*, Dec. 10, 1881, the particulars of a few cases which will illustrate the fact that a woman can, not only produce self-abortion, but can do so scientifically. Says he:—

In the fall of 1877 I saw Effie D., eighteen years of age. Four days before my first visit she miscarried, which was followed by puerperal peritonitis, for which latter trouble I was called to see her. Her elder sister gave me the following account of the case: Out of wedlock she had become pregnant. When three months gone in pregnancy, she sought to produce abortion by the advice of an old woman, who told her to get a round stick, as large as she could introduce well into the vagina, round and smooth at one end, then introduce it, and "job" the mouth of the womb with it as hard as she could "stand" it, and to repeat the procedure three or four times a day, until the desired effect was produced. After the third day's "jobbing" she was taken with labor-pains, and within eight or ten hours abortion was completed.

The following case shows the application of scientific means to create self-abortion:—

In the spring of 1879, I was summoned by a servant girl, in great haste, to see Mrs. G., the wife of a railroad man, who she said was in a dying condition. I found the patient unconscious, and while examining for a cause of her condition, I noticed that she was having something very much like labor pains. I inquired of the servant if the patient was in the "family way," but she said she didn't know, and all I could learn from the girl was, that while in an adjoining room she heard the patient scream, and when she got to her she was in the unconscious state in which I found her. I was soon convinced, however, that my patient was having labor pains, and at once made a digital examination; and you may judge of my surprise when I found what subsequently proved to be a small, rounded piece of whalebone, ten or twelve inches in length, protruding from the vagina. Further examination revealed the smaller end lying loosely in the mouth of the womb, which was considerably dilated. I removed the whalebone, and in ten or fifteen minutes the womb expelled a fœtus of perhaps three and a half or four months. My patient soon rallied, and became very talkative and free to *explain*, after the servant girl, who was the only other person in the house, left the room. She explained as follows: Three years previously, while residing in Chicago, she went to full term in her *first* pregnancy, and the child had to be taken from her in pieces. In a year she again became pregnant, when, upon consulting her physician, the same who attended her before, he advised the propriety of an early abortion, to which she and her husband readily agreed. She was then about three months advanced, and the operation was performed by the physician introducing a long, flexible instrument (perhaps a gum-elastic bougie) into the womb and leaving it there; she lying in bed from the time of its introduction until she aborted. Again becoming pregnant, having left Chicago, being about three months advanced, and fully determined on abortion, she decided to undertake the operation herself. I will say just here, that she was a woman of unusual intelligence, and knew more about herself than most women do about themselves. So she procured the piece of whalebone and prepared it very nicely; she then went to bed, and with the forefinger of the left hand found the mouth of the womb, and with her right hand succeeded, after a while, in introducing her improvised probe. In about three hours she began to feel some pain, which gradually grew worse, and the last she remembered until "all was over," was a very severe pain which seemed to extend from her womb to her head.

A very common practice among the negro

wenches of the South inducing self-abortion, is by jumping from high places, such as a fence or gatepost, to the hard ground. I believe that a very large majority of self-abortions, as well as all other superinduced abortions, are produced by the use of oxytocics, principally cotton-root and ergot. I think I am warranted in estimating the proportion of self abortions as at least one-third of all that are superinduced.

Rötheln or German Measles.

Dr. J. W. Byers says, in the *Brit. Med. Jour.*: "There is scarcely another disease upon which the views of authors differ so vastly, as upon rubeola" (rötheln). So wrote Vogel; and although, since the time these words were penned, very great advances have been made in our knowledge of the disease, its exact nature and position among the exanthemata do not seem to be absolutely determined, as is evidenced by the fact that, in the section devoted to diseases of children, at the forthcoming International Medical Congress, one of the subjects that the committee have selected for discussion is the real position of rötheln, and its relation to scarlatina and measles.

Nothing has caused more confusion than the number of names under which the disease has been described. Thus it has been called rubeola, German measles, scarlatina morbillosa, hybrid measles, epidemic roseola. rose-rash, rötheln, etc.

Is rötheln merely a mild form of measles, or of scarlatina, or a combination of both (a sort of hybrid)? or is it a disease *sui generis*? In the *Dictionnaire Encyclopédique des Sciences Médicales*, it is described under the head *Roséole*; and the writers of the article think that those cases which have been published as cases of rötheln, are to be regarded either as measles or abnormal forms of scarlatina, or as combinations which they term rubeolo-scarlatinas (*rubéolo-scarlatines*). These writers state that cases of rötheln are exceptional in private practice, and occur only in the course of certain epidemics; and that they are but little observed except in children's hospitals, where, from the crowding together of patients suffering from the different exanthemata in different stages of their development, hybrid products arise, which are deviations from the normal type of the fevers—in fact, pathological monstrosities (*monstrosités pathologiques*).

I think there can be no doubt that many cases of rötheln are diagnosed as mild or abnormal varieties of measles or scarlatina, especially when epidemics of these fevers are prevailing. Many so-called second attacks of these diseases are probably also cases of rötheln. That, however, rötheln is a specific disease, quite distinct from either measles or scarlatina, and having definite features of its own, has long been held in Germany: and this view has been steadily gaining ground in England, where it has been supported, among others, by Aitken, Murchison, Bristowe, Liveing, Duckworth, etc. That it is quite distinct from measles and scarlatina, seems to be established, apart altogether from its own peculiarities, by the fact that a previous attack of measles or scarlatina, does not give immunity from rötheln (and this was exemplified in my case), and that having had rötheln, does not prevent one from taking measles or scarlatina.

It is only by the careful observation and reporting of cases that our knowledge of rötheln can be rendered complete; and when this is done, it is probable that rötheln will occupy a position as distinct as measles or scarlatina. These were for many years regarded merely as varieties of one and the same disease, and were only finally separated about the middle of the eighteenth century.

Examples of Chorea from Emotional Excitement.

Some interesting illustrations of chorea from this cause are given by Dr. James Russell, in the London *Medical Times and Gazette*, July 23d, 1881:—

Case 1.—A fine developed, high-spirited and passionate, but healthy girl, aged sixteen, was much frightened by a slight cut on her finger, from which much blood flowed; at the time, too, she was in a violent passion with her mother. On the same evening choreic movements came on "in the arm on the same side." In a week the leg became involved, and in a day or two the face and tongue. In the course of fourteen days the choreic movements became greatly exaggerated. and continued to augment in violence, causing general excoriation from constant friction, but without emotional development, for nine days, when she died. Her heart was found healthy, as were all the other organs.

Case 2.—This case related to a girl aged sixteen, in good health, and living under favorable conditions, passionate, but not hysterical, nor in any way nervous; the sounds of her heart pure. She was very much frightened by a fall on her left side, doubling her wrist under her. She soon recovered from the fright, and thought no more about it. Choreic movements commenced on the following day, and became very severe in four days. The disease presented its most violent form for three days, and then gradually subsided.

Case 3.—A chlorotic looking girl, an orphan, aged nineteen, overworked and underfed, not rheumatic, was preparing to emigrate to America, her passage having been paid, when she "spent silly" some money sent over to her to defray her expenses. She was much troubled thereby, and the present illness began, and put an end to her intention of leaving the country. The movement came on gradually, increasing in severity, and at the end of a fortnight or three weeks attained great violence, which for ten days seriously threatened the patient's life, and only subsided tardily.

I may adduce in this connection two other illustrations of a large amount of energy having been released through the application of a comparatively low degree of force, when, as in chorea, the explosive material lies ready to hand, and the restraining influence by which it is normally controlled has been lowered. The incidents did not occur as a primary cause of the chorea, but produced severe aggravation of the disease. In one case a girl, aged twenty-one, had been suffering from choreic movements of a mild character for two days, when her attention was directed to her condition; she immediately

burst into tears, and from that time the movement became greatly aggravated, and speedily developed into a severe form of the disease, with much emotional development. The second instance occurred in an emotional girl who entered the hospital with mild chorea of a month's duration. Ten days afterwards she was much excited by hearing a band of music; she jumped out of bed and was worse directly; the movements became so violent that she was placed in a private ward, and it was a month before any permanent amendment was effected.

Aspiration in Hydatids of the Liver.

In a recent monograph* published in London, Dr. Balding records nine cases of hydatid disease of the liver treated by electrolysis or simple acupuncture, and all with good results. It is to be noted, however, that the tumors were all in young persons, and of small size. Also, in several of the cases, fluid evidently escaped into the peritoneum, which, in the case of purulent contents, would in all probability be fatal. He records thirty cases in which, by means of caustics or incisions, a considerable opening was maintained from the first. The results are not favorable, prolonged suppuration having generally followed, with a fatal result in ten cases. He also records a number of cases in which the cyst was punctured with a small trocar. Out of 155 cases, the fluid on the first puncture was clear in 106, thick or purulent in 49. Among the 49 cases we have 26 cures, 20 deaths, and 3 results not stated—the class in which the contents were clear thus showing 81 per cent. of cures, as against 53 per cent. where the contents were purulent. Again, of the 106 cases in which the fluid was clear at the first puncture, in 35 cases the contents subsequently became purulent, while in 71 there was no evidence that suppuration ever took place. Of these 71 cases last mentioned, there were 58 cures, 11 deaths, and 2 results not given.

The conclusions to which Dr. Balding comes, and which are fully justified by the cases, and the statistics he adduces, are as follows: 1. So soon as the tumor is actually felt, establish the diagnosis by the introduction of a fine aspirator needle. 2. Should the fluid be clear, withdraw the greater part or the whole of it, and close the wound. 3. Should the fluid be purulent, introduce a large trocar, leave the cannula *in situ*, and wash out the cavity once or twice daily, maintaining a free opening and keeping the abdomen well bandaged. Several cases recorded by Harley, belonging to this last class, did not do well till a free opening was made.

Case of Imperforate Anus.

Dr. Luther Sexton, of Hazlehurst, Miss., reports the following case in the New Orleans *Medical Journal*, for December, 1881:—

On the 22d of September I was called to see a baby (Lucy Minor), stout and hearty; weighed 8 pounds at birth, but it had not defecated since its birth, Sept. 20th, though it had been given oil and salts on two different occasions. On examination, I found it fretful, a little feverish, with abdomen considerably distended and tympanitic on percussion. The natural inference of Dr. Purnell and myself was, that there was an accumulation of gas and fæces.

Upon examining the rectum we found it impervious and decided to operate at once, and after debating for some time over the different operations, viz: Littres', Callisen, and Amussat, we finally performed the perineal operation, because we thought we could detect fluctuation in that location, and preferred making the opening at the proper place. I will not describe the operation further than to say I made the first incision by transfixion, and then cautiously dissected up the curve of the sacrum, avoiding the iliac vessels, bladder and peritoneum, till the gut was reached, which presented a dark, glistening appearance. On making an incision into this, at least half a pint of a very dark meconium passed from the child, with a large quantity of gas; this was not offensive. I did not bring down the mucous membrane of the gut and stitch it to the skin, as recommended, because I did not think it practicable in this case. The gut was found rather high up and the parts were so tender that I did not think that sutures would hold, and I expect to keep the parts constantly dilated, to prevent contraction, and think this will answer every purpose. I cannot tell yet what control it will have over the sphincter muscle; in fact, I am not certain it has any. I was cautious in not making the opening too large, as I did not want to wound it, if it was there. The baby is doing well; has its actions naturally; is healthy in every way; no other deformity, nor has there ever been any in the family. The mother and father are well grown and perfectly healthy in very way. It is hardly necessary for me to say I used the ordinary carbolized dressing, with every precaution in regard to cleanliness.

A Case of Anuria of Seventeen Days' Standing.

Dr. C. A. Bryce, of Richmond, Va., writes in the *Southern Clinic* for December, 1881:—

About a month ago I was consulted by James Taylor, colored, factory hand, residing at 305 West Broad street, who said that he could not pass his water, and was suffering some pain and uneasiness in the lower part of his abdomen, or "bottom of his belly," as he located the place of uneasiness. He said his pain was not great by any means, and he wished to see about the trouble as much to satisfy his mind as to relieve his pain, as he had passed no water for *seventeen days*, and felt somewhat concerned as to what was the matter.

A number eight catheter was readily passed into the bladder, and about a pint of urine was drawn off, high-colored and somewhat ammoniacal in odor. Upon questioning the man closely in reference to the time he had been without voiding urine, and doubting the accuracy of his statements, he stated that there could be no doubt about the fact of his not having passed any water for the time mentioned, as he was in Manchester

* "Hydatid Disease of the Liver: its Diagnosis and Treatment." By Mortimer Balding, B.A., M.D. Cantab. London: Harrison & Sons.

on Sunday a fortnight back and passed his urine before coming back to Richmond; before going to bed he tried to pass it, but could not, "and not one drop have I passed until to-day, which is Wednesday, making seventeen days." This man said he had no inconvenience during the entire time, no sick stomach, no headache, and not a single symptom of disease; that he had pursued his daily avocation as a lump-maker in the tobacco factory, and had concluded not to consult a doctor until he had some cause to do so. And finally, that having some pain over his bladder, he had consulted me, thinking the time for professional advice had arrived. He has since passed the usual amount of urine daily, and is, to all appearances, in perfect health. I have not the least doubt in my mind that the man's statements were correct in every particular, and give his name and number, so that any of our physicians may see him and question him further upon the subject, should they feel an interest in the matter.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

LITERARY EXCHANGES.

"*The Century Magazine*," or *Scribner's Monthly*, for January, is a splendid number. The frontispiece is a fine portrait of Louis Adolphus Thiers, and Elihu B. Washburne gives a very interesting reminiscence of the noted Frenchman. Mary Hallock Foote contributes a finely illustrated paper, "A Provincial Capital of Mexico." An interesting article by Catharine Cornaro, on "The Revival of Burano Lace." Mrs. F. Hodgson Burnett's new story, begun in November, "Through One Administration," is continued, also W. D. Howell's new serial, "A Modern Instance." "The Caverns of Luray," Va., by Ernest Ingersoll, illustrated, and a very interesting article illustrated by Lucy M. Mitchell, on Oriental and Early Greek Sculpture. There are numerous other papers of much interest, which, with the always attractive editorial Topics of the Times, make the January number one exceptionally good.

"*Harper's Monthly*," for January, is, as usual, very good. Its contents, "King Coal's Highway," by G. F. Müller, and "With the Vanguard in Mexico," by W. H. Bishop, are attractive and well illustrated. "Ancient and Modern Venetian Glass," by J. J. Jarvis, is very readable. Constance F. Woolson's novel, "Anne," is continued, and Thomas Hardy's "The Laodicean," comes to a felicitous ending. A fourth paper by Mr. Hatton, and George R. Crooks' paper on the Young Men's Christian Association, have some fine portrait illustrations. F. R. Stockton has one of his characteristic stories. Hon. Geo. Edmunds and Robert T. Keep contribute papers of much interest. The poems are short but good, and "Pastor Dankwaldt," illustrated. The "Easy Chair" contributions of the editor have the never-failing freshness and gracefulness so characteristic of *Harper's Monthly*.

"*St. Nicholas*," for December, is a charming Christmas treat, not only for the young people but for the older readers. Some of the illustrations are exquisite, and all attractive. We can name but a few of the charming articles of this number: "Donald and Dorothy;" "An Angel in an Ulster;" "Stories of Art and Artists;" "Little Polly's Voyage;" "The Hoosier School Boy," etc.

"*Littell's Living Age*" comes, with every week's treasures, unequaled in variety and interest. A model magazine.

BOOK NOTICES.

A Manual of Midwifery. By Alfred Meadows, M.D. Lond., F.R.C.P., late Examiner in Midwitery at the Royal College of Physicians, etc., etc., assisted by Albert J. Venn, M.D., M.R.C.P., Obstetric Physician to the Metropolitan Free Hospital, etc., etc. The fourth edition, revised and enlarged, and illustrated with 137 wood engravings: G. P. Putnam's Sons, 27 and 29 West 23d street, New York. 1882. Cloth, small 8vo, pp. 498. Price $2.50.

As a manual for students and young practitioners, we have always regarded Dr. Meadows' as one of the best in the English language. In this new edition several additions have been made, the entire text has been carefully revised, and matter that seemed obsolete has been omitted. The general arrangement of the work, which makes it especially adapted as a book for ready reference, has, however, not been changed. The illustrations are good, and the general appearance of the book very fair.

Walsh's Physician's Handy Ledger, a Companion to Walsh's Physician's Combined Call-Book and Tablet. Published by Ralph Walsh, M.D., 332 C street, Northwest, Washington, D. C. Price: 600 patients $3.50; 1200 patients $6.00.

The Handy Ledger is designed to assist the hurried and busy practitioner in keeping his accounts. The plan of the book is so simple, yet complete, that but a half hour per week is needed to keep a large practice posted up. It is equally well adapted to the wants of city or country practice, and will accommodate six and twelve hundred names. At the end of the year the entire year's work and nature of attendance can be seen at a glance. It is the most simple, yet complete, system of book keeping we have ever seen, and is sure to repay its cost many times by saving time and labor, and enabling the busy practitioner to keep his accounts straight.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,

115 South Seventh Street,

PHILADELPHIA, PA.

THE HYGIENE OF SCHOOLS.

The subject of school hygiene is receiving close attention in Cleveland, and the method there adopted is worthy of the highest commendation, and of imitation in other cities. It is based in a general way, and with such adaptations as recommend themselves by the difference of surroundings, on the system of medical inspection of schools in the city of Brussels, Belgium, as carried out by the city Health Department.

The authorities of Cleveland have reproduced the forms of blanks used in Brussels, and have published them, with extracts from the reports of Drs. Janssens and Bonmarriage, explaining their application and utility. We believe copies can be obtained by addressing Dr. L. B. Tuckerman, of Cleveland, to whom we are indebted for a specimen.

It is justly said, in these reports, that with regard to non-contagious, chronic, or constitutional diseases, we believe we do not go too far in saying that the school is destined to be the field where preventive medicine will give the most manifest proofs of its power and win its most glorious victories. If we justly consider the school as a moral agency which should help to depopulate the prisons and galleys, we can equally, from our present point of view, regard it as destined to lighten the budget of the hospitals and almshouses. It is certain that at his home, the child of a laborer, if afflicted with a chronic disease that does not confine him to his bed, will but rarely be the object of that hygienic care indispensable to him; while in the class room, under men both competent and devoted, he can be submitted to an incessant watching and an assiduous care, of which his cure will be very often the assured reward. To care for the children in school so that they shall not become good-for-nothings in the social workshop and in the ranks of the defenders of their country; so that they shall not contribute later to burden the budget of the official charity already too heavy; such is the goal assigned to the efforts of the devoted men who are sacrificing their time and more remunerative occupation to secure to the young generation at school new elements of health, that is, of riches and social prosperity. The subject cannot be too forcibly urged on the attention of medical men in all parts of the country.

THE SPREAD OF SMALLPOX.

On previous occasions we have urged the importance of a new study of smallpox, and the means of its prevention. It is only too obvious that there has been, in the last ten years, an increase of the disease, both in Europe and America.

Does this come from the opposition to or the neglect of vaccination? Does it proceed from the use of inert vaccine matter, or erroneous methods of employing that which is active? Is vaccination itself, however well performed, merely a temporary check to the extension of the disease? Should both vaccination and revaccination be made obligatory and performed at government expense, as an indispensable means of public protection?

These are the questions which, in one form or

another, have often been put in these columns, and still remain unanswered. They have been put also by the most eminent sanitary authorities of the world, and rank among those the solution of which most nearly concerns the immediate welfare of the State. So much prejudice for and against the possible answers exist, that it is far from easy to arrive at a correct conclusion, even when ample statistics are furnished. The result is that while the Doctors debate the patients sicken and die.

An item which ran through the newspapers at the close of December, shows how earnest is the need of decision and action. It was to the effect that the Post-office Department had been appealed to by postmasters in some places to adopt some method of protecting them from mail matter infected by smallpox, "even to the extent of stopping the mail altogether if other means fail." The Department was, said the account, considering the matter.

It is officially stated that smallpox exists in thirty-seven places in Illinois, although in about two-thirds of them the disease is believed to be under control. A telegram from Keokuk, Iowa, of the same date, reports that between thirty and forty of the medical students there have contracted smallpox from a body imported from Chicago and used in the dissecting room of the college.

A number of cases of smallpox were reported in Buffalo, and the disease on the increase, while from New York city and smaller towns in many portions of the Union, the same reports were sent.

With such facts staring them in the face, the Legislatures of the different States will soon have to adopt decided measures to stay the pestilence. The inertness and indifference which characterize such bodies must give way to a rational regard for the sanitary condition of the community. The organization of Boards of Health and Local Boards is the first step. Nothing can be done effectually and permanently without this step. And any brief spasmodic endeavor will be of no lasting service.

Notes and Comments.

A New Application of Electricity in Labor.

At an adjourned meeting of the Paris Academy of Medicine, Dr. George Apostoli read a communication on the above subject. He remarked that at present histology and clinical observation agree in attributing almost all cases of metritis or uterine engorgement to interrupted uterine involution. He, therefore, proposes as a prophylactic agent in an affection which so often follows labor, the adoption of the following new therapeutic method. He thus expresses himself: A woman having been delivered, whether at full term or not, I immediately apply to her uterus a faradic or induction current, generated by a coil made from a short, thick wire, and of progressive intensity. In case of normal and full-term labor, I renew this operation eight or ten times within about six days. In cases of difficult or premature labor, I repeat it fifteen or twenty times through a period of from ten to fifteen days. My object is to aid, hasten, and perfect uterine involution, and thus avoid all the complications incident to slow or deferred convalescence.

The following conclusions have been reached by the study of thirty-two cases within the past two years, comprising eleven premature births and twenty-one full-term deliveries, during the course of which I have performed a total of five hundred electrizations of the uterus while in a gravid or puerperal state: 1. Faradization of the uterus is always absolutely harmless. 2. It invariably has a calming and sedative effect. 3. It greatly reduces convalescence by hastening the involution or retraction of the uterus, which, in general, from the sixth to the eighth day, can no longer be felt under the pubis. 4. By faradization the return and regular exercise of all the functions is accelerated. 5. The patient is spared all the uterine complications incident to labor. 6. Faradization is really a preventive treatment against uterine deviations and such consequences of labor as retroflexions or retroversions. 7. Its effects, I believe, are to reduce lochial discharges. 8. In presence of a faradic current of given strength, uterine contractility greatly varies, and is in the inverse ratio of its inertia. 9. Finally, the effects of faradization on the uterus, as compared with those of ergot, are undoubtedly more prompt and energetic.

In conclusion, I propose the introduction in obstetrical therapeutics, of uterine faradization in every case of labor: First, because it is a

wonderful method, of easy application, readily controlled, rapid and energetic in its effects, always harmless, and capable of being applied or discontinued at will. And second, because its immediate effects tend to restore the patient's health, while it ultimately guards against all subsequent uterine complications.

Pencils of Tannin in Chronic Metritis.

℞. Tannin, grs. 30
Pure glycerine, gtt. 3.

Make four pencils, two inches long.—*Bull. Ther.* (*Bouchardat*).

Malaria and Diabetes.

At a recent meeting of the Academie, M. Verneuil called attention to the relations existing between glycosuria and malarial diseases. Both maladies coexisted in six cases observed in his service, where the patients entered for various surgical diseases (epithelioma of the penis gangrenous patch (plaque) on the heel, tumor, etc.)

The principal memoir on the coexistence of these two morbid states is by M. Burdel, of Vierzon, presented to the Acad. des Sciences, in 1859. This observer found sugar in 80 out of 86 cases of true intermittent fever. The conclusions he arrives at are as follows:—

1st. There exists in malarial fever a veritable glycosuria.

2d. This diabetes is ephemeral; it appears with the fever, persists during its continuance and disappears with it.

3d. The glycosuria of intermittent fever reveals the deep and special effect this form of fever has on the equilibrium existing between the cerebro-spinal and the sympathetic nervous systems.

4th. This explanation, given by Cl. Bernard, is in conformity with the clinical facts.

5th. The more violent and intense the access of fever, the greater the quantity of sugar found in the urine.

6th. When, on the contrary, the attacks become more numerous and less intense; when, in a word, the malarial cachexia becomes established, then it will be found that the quantity of sugar is much less considerable.

The cases observed by M. Verneuil have led him to somewhat different conclusions, and none of his patients had had actual attacks of intermittent for some time previous to coming under his observation. These cases and others have led M. Verneuil to arrive at the following conclusions:—

1st. Malaria frequently engenders glycosuria.

2d. Which presents itself in two forms: the one cotemporary with the febrile attack, and like it, short and fugacious; the other supervening at a period, more or less distant, independent of the febrile paroxysm and permanent.

3d. Permanent glycosuria seems to attack, by preference, vigorous subjects, having some leaning to the arthritic diathesis.

4th. Glycosuria, of malarial origin, appears to be one of the benign forms of diabetes.

5th. Intermittent affections supervening in such subjects, may take on certain characters of malaria or glycosuria, or of both diseases at the same time.

Traumatic lesions may awaken or aggravate the two diatheses, particlarly the accidents of malarial origin.

M. Leon Colin considered that a greater number of observations were needed to confirm the conclusions arrived at by M. Verneuil.

Local Temperature in Acute Abscess.

M. Assaky, interne in Prof. Gosselin's service, has made some very interesting researches regarding the local temperature in the centre of an acute phlegmon. The mode of treatment pursued in Prof. Gosselin's service permitted direct mensuration, and M. Assaky was enabled to draw the conclusions at which he arrives from personal examination in 123 cases.

M. Gosselin generally makes a small, narrow incision, allowing the pus collected to escape, and then injects alcohol at 90°, so that the internal temperature of the abscess could be taken at the debut of the phlegmonous inflammation, and at any period during its evolution. To render the experiment more exact, the surface temperature was taken over the abscess, over the corresponding parts on the other side of the body, and in a certain number of cases in the axilla.

From his researches, M. Assaky has arrived at the following conclusions:—

1st. The temperature in the centre of a subcutaneous acute abscess varies from 37.5° C. to 38.5° C. It oscillates between these two figures, no matter in what region the abscess be situated, and whatever the age and constitutional condition of the patient.

2d. The surface temperature over the abscess is always higher than that on the corresponding part of the other side of the body. Sometimes it is from one-half to two degrees and a half

(Centigrade) higher. In about one-half of M. Assaky's cases it was from one degree to one and one-half higher.

3d. This localized elevation of temperature tends to disappear as the abscess approaches complete cure. Nevertheless, the rise and fall of the temperature proper of the abscess is independent of the general temperature of the body.

Thymol in Diphtheria.

The following mixture containing thymol has, we read in *Le Progrès Médicale*, proven very efficacious in Dr. Warren's hands:—

℞.	Thymol,	gr. ivss–viss
	Potass. chlorat.,	℥ iiss
	Quiniæ bisulph.,	℥ ss–℥ j
	Sp. vini gall.,	℥ viiiss
	Glycerinæ,	℥ ij. M.

For children, from two to five years of age, a dessertspoonful may be given every hour, or every second hour.

The mixture should be given, if possible, undiluted, in order to obtain its excitant, almost irritant action on the buccal parietes.

This mixture may also be employed as a prophylactic agent against diphtheria and malaria. By the addition of a few drops of tincture of iron to each dose it acts as a tonic and may be employed with success in typhoid fever when diarrhœa is present.

Chloral Injections in Incoercible Vomiting.

Dr. Vidal, of the St. Louis Hospital, Paris, has often used the above with success. In cases of vomiting during pregnancy, these injections, composed of half a pint of infusion of orange leaves and one gram = 15 grains of chloral, are given twice daily. Care being taken to administer them an hour before meals.

Dr. Dussaud, in a recent address before the Medical Society of Marseilles, mentioned the case of a woman, 28 years old, pregnant, who, at regular monthly intervals, suffered from incoercible vomiting; this was subdued by chloral injections. (*Paris Médicale*, Nov. 12th, 1881.)

Ixora Danduca in Dysentery.

The Indian *Medical Gazette* recommends as an efficacious remedy for dysentery the tincture of the fresh root of the ixora danduca. The whole root, and not the bark only, must be used to prepare the tincture, and the fresh root is found to be better than the dried.

To make the tincture, bruise the root, macerate for a week, four ounces of it in a pint of rectified alcohol, express and filter.

A compound tincture may be made by adding to the tincture 3 drachms of long pepper, powdered. The dose is from 30 to 60 grains (Troy), three or four times a day. This is an excellent remedy, and possesess an aromatic, agreeable taste.

Special Reports.

NO. I.—THE MANAGEMENT AND DRESSING OF WOUNDS.

(*Concluded from p.* 26.)

MODIFICATION OF LISTER'S DRESSING.

A useful and convenient modification of Lister's dressing is one used by Dr. James L. Little, of New York City (N. Y. *Medical Journal*, Dec. 1881). He has employed it for some years in torn and lacerated wounds, with much success. The description he gives of it is as follows:—

Having put the parts in a condition for dressing, I wash the wound in a solution of carbolic acid, of the strength of one to twenty; I then cover the parts with a thick layer of borated cotton, and then snugly and evenly apply a simple gauze bandage. At first I used bandages made of antiseptic gauze, but for the past three years have used those of plain uncarbolized cheese cloth. These thin bandages distribute the pressure more evenly over the cotton, and are more easily saturated with fluids than those made of unbleached muslin.

The patient is instructed to keep the outside of the dressing wet with a solution of carbolic acid of the strength of one to one hundred. I frequently employ Squibb's solution of impure carbolic acid, which is of the strength of one to fifty, and which, when mixed with an equal bulk of water, gives a solution of the desired strength.

The parts should be kept at rest, and the dressings may be left undisturbed for several days, unless there is pain, rise of temperature, or discharge through the dressings. These conditions are always to be considered indications for redressing.

In many cases where rubber drainage tubes have been used, they may be removed at the second dressing, and if catgut has been used for sutures, this second dressing can be allowed to remain on for an indefinite period. In a number of cases of lacerated wounds, I have allowed the first dressing to remain on until the wound has entirely healed. In these cases the external use of carbolic lotion was discontinued after the fifth or sixth day, and the dressings would become dry and hard, the wound healing, as it were, "under a scab."

The patient should be instructed to loosen the bandage at once, if any pain occurs.

PREPARATION OF PHENILATED TARLATANE FOR ANTISEPTIC DRESSINGS.

Paris Médicale (November 12th, 1881) publishes, from a Vienna medical journal, Professor

Kaposi's method of preparing phenilated tarlatane, as a cheap and convenient substitute for the more complicated, and often not easily procurable, articles used in the Listerian dressings for wounds.

Pieces of unbleached tarlatane, of convenient size, are immersed in a liquid contained in a covered receptacle, and composed as follows:—

℞. Water,	5 litres,	=	Oxi
Alcohol,	500 grams	=	℥ xvij
Glycerine,	500 "	=	℥ xvij
Phenic acid,	300 "	=	℥ ix, ʒ iij.
			M.

These pieces of tarlatane are allowed to macerate in the liquid for about eight days, and as they are required for dressings, are daily replaced by fresh pieces, which are placed at the bottom of the receptacle.

In cases of pressing necessity, an immersion of two hours suffices to destroy all germs which may be contained in the tissue.

Dressings thus prepared should first be rinsed in lukewarm water, and then wrung out, so as to free them from any excess of phenic acid. Otherwise, this might have a corrosive effect on the epidermis, and cause slight symptoms of phenic intoxication, manifesting themselves by black urine.

The edges of the tarlatane strips are lined with cotton wool so as to filter the air, and the whole is covered over with some impervious material, and bound with a strip of net tarlatane, still containing its starch sizing. In drying, these strips adhere to the dressings and skin, and are not disturbed by the patient's movements. As regards the impervious material, Mr. Bœckel has used in place of Lister's *mackintosh*, which is rather expensive, sheets of india rubber cloth, or even *vegetable parchment* (ordinary paper dipped in sulphuric acid); oiled or parafined paper, could likewise be used, and if in two or three thicknesses, would be as resistant as india rubber.

Gummed *silk* is useful in bringing together wide sores, and preserving them from the irritating attacks of phenic acid. It should be fenestrated so as to prevent pus from accumulating beneath it.

SPONGE DRESSING.

The value of the sponge dressing, to which we have already alluded, is explained by Mr. S. Gamgee, in the *Lancet*, November 12, to be simply the application of an old principle, and, perhaps, not a very brilliant one. He observes:—

In the hands of a very careful surgeon, sponges may be used with safety; but it is quite conceivable that the difficulty of cleansing them thoroughly may have proved a source of foulness and its attendant evils, and may explain the abandonment of the use of sponges by all, except a few surgeons. I hold that absorbent and elastic wound dressings, so favorable to drainage and compression, should be burnt after use: and I know of no such dressings more cheap, handy, and efficient than the absorbent and antiseptic gauze and cotton pads, prepared on my suggestion, by Messrs. Southall Brothers and Barclay. But whatever the material used, whether oakum or tenax, sawdust or earth, tow or stypium, salicylic silk or cotton, sponge or pads, is only a question of practical detail. The governing principle is the same. Dry and infrequent dressing, immobility, and pressure are the essentials of wound treatment.

ESMARCH'S PERMANENT ASEPTIC DRESSING.

The eminent surgeon, Esmarch, has carried asepticism to its logical conclusion, maintaining that if a wound is once well and completely dressed antiseptically, it should heal without much further attention, and that changing the dressings is merely incurring new dangers needlessly. The method has stood this test wonderfully. In one of his recent addresses, Prof. Lister himself said of Esmarch's plan:—

I cannot forbear making a passing allusion to the extremely remarkable results which have been related by Professor Esmarch, as obtained by his permanent dressing—results so surprising that they would be incredible were it not for the perfect trustworthiness of the authority that vouches for them. And I would ask those who advocate mere cleanliness, as distinguished from antiseptic practice, how they can reconcile their views with facts such as these? What can be more dirty, in the ordinary acceptation of the term, than a wound left covered up with the same dressing for weeks together, the original blood and serum remaining upon it intact under this "Dauer-Verband?" Yet it is surgically clean, because it is aseptic. On the other hand, the æsthetically cleanly water-dressing is surgically dirty, because it contains elements which give rise to septic changes in wounds.

GENERAL ACCEPTANCE OF ANTISEPTIC DRESSINGS.

In spite of criticism and opposition, there is no doubt but that the aseptic plan of dressing wounds has gained a permanent foothold in surgery. In his address at the International, Prof. Volkmann said:—

In speaking of the open treatment of wounds, I have touched on the opposition which the new doctrine at first met with on so many sides. You all know well how violent this was. Even in science great changes cannot be brought about without injury to numerous individual interests; but I insist that nowadays no serious opposition exists; that there is no surgeon who would dare, at the operating table, or in the treatment of the wounded, quite to renounce antiseptic methods; who calmly and with a good conscience would tread the paths which, fifteen years ago, we all followed like sheep. Even the most

obstinate have had to give way to the great principles of the new era, and often in a much higher degree than they acknowledge to themselves or others; the necessity not only of the disinfection of hands, sponges, instruments, and bandages, but also the necessity of a primary disinfection of fresh wounds, is, I believe, universally acknowledged.

CORRESPONDENCE.

Alcohol in Diphtheria.

ED. MED. AND SURG. REPORTER:—

Inasmuch as the time has not come when the remedy for diphtheria has been found which can be depended upon every time, it is the duty of all who are called to treat it to give the results obtained to the profession, so that different results may be compared. This is a subject which has very greatly interested me, and I have sought in every way that I could to become informed upon the treatment of this terrible disease. I have never met with an epidemic of it, and yet I have had some severe and fatal cases. I have met with some success in the treatment of severe cases, and cannot say but they would have been fatal, had not prompt treatment been commenced and persistently carried out.

A few years since, when Dr. Drysdale published his paper, and it was given in the MEDICAL AND SURGICAL REPORTER, with the results attending the use of chlorate of potash in his hands, I was greatly interested in it, and read and re-read it a number of times. I carried its teachings out in my practice, and felt very much pleased with my success, and have great faith in chlorate of potash now, as being a valuable remedy in the treatment of diphtheria. I think the failures from its use are to be ascribed to its not being given as freely as Dr. Drysdale urges. I met with numerous cases which recovered under its use. An article from the pen of Dr. Jacoby, of New York, in which its poisonous action was described, with some fatal results attending its use in large doses, brought to my mind a case that came under my care, of a clergyman who was taken with this disease, and to whom I was called. I prescribed for him the saturated solution of chlorate of potash, to be taken in tablespoonful doses every two hours. The gentleman was one of those impulsive men, and thought if a little would do good, that double the quantity would do more. At evening the medicine was gone, and had to be renewed. The next day, towards evening, he was taken with vomiting, and I could not tell why, for he had appeared better in the morning. The urine which he voided was as dark as coffee, and caused me some apprehension. The potash was discontinued and the next day he was improving. From Dr. Jacoby's article I learned that my patient had taken too much potash, and there was danger of acute nephritis supervening. Since that time I have been careful to have my directions followed more closely.

I read of Dr. E. N. Chapman's success with alcohol in the treatment of this disease, and resolved to give it a trial when a case should present itself. The first case was myself. During the past winter of 1881 I was taken with a severe chill at night, which lasted part of the night, followed with a high fever. My throat was not much sore, and I did not know what was coming upon me. I inspected my throat and saw several large patches of membrane, covering both tonsils; resorted to the use of whisky, taking every hour two large tablespoonfuls for twenty-fours before I began to feel better; and when I did begin to improve I discontinued its use; the membrane came off my throat, but it was several weeks before I got strong and well.

My second case was a little boy of six or seven years, who had moved from a town where it had prevailed as an epidemic, and several had died. When I first saw him he was feverish, but did not complain of his throat, and I prescribed a fever mixture and thought it a case of malarial affection. The next day he appeared so much better, I was requested not to call. In the evening, his father called to see me and get some more medicine, and I concluded to see him the next morning. On seeing him, he did not appear any worse. He said his throat was sore, and I examined it, and was surprised to see so much deposit in the throat and covering the tonsils, from so little constitutional disturbance. I immediately began the use of whisky every hour, in two teaspoonful doses, and continued it until the system came under its influence, the membrane came off the throat, and he began to improve. A few weeks after, his eyelids were partially paralyzed, and he could hardly hold up his head, from muscular weakness. His head would tip from side to side, and he could hardly speak, and his eyes were squinted. This continued for a few weeks, when he began to recover his strength.

The third case was my son, a lad of nearly twelve years, who came down with the diphtheria after school, and when inspected, his throat, the tonsils and fauces, were covered with a thick membrane. I gave him the same treatment, and did not remit the whisky until his system came under its influence, when the membrane would come off in flakes, leaving a deep ulcer on the tonsil, but the membrane did not form again, and he recovered, but was weak and trembling for some days; he improved under the use of quinine and iron. I used the chlorate as a gargle all the time, and gave some of it internally. I want to impress upon the profession the importance of giving special attention to the throat when first called, and when convinced of the nature of the disease, to begin at once the use of some alcoholic stimulant, and push it until the system is saturated, and not to desist until that point is reached. You will be surprised at the amount that can be taken before the system will feel its stupefying effect. I hope all who have to treat this disease will give this remedy a trial, and see how well you can control this fearful disease. Let me quote a note from Dr. F. C. Roberts, of Fort Madison, Iowa, in *Gaillard's Medical Journal*:—

"While cauterizing a patient's throat, the victim coughed, throwing the diphtheritic membrane all over my face. After a few days I fell

ill with the disease and suffered severely. I used the ordinary routine treatment, but became gradually weaker. The membrane in my throat nearly suffocated me. At last, becoming very weak, I sent for some whisky to use as a stimulant. A drink of it nearly suffocated me, and I strangled badly, and coughing hard, ejected a large quantity of membrane in an almost cooked condition; immediately relief followed, and in a short time I again used the whisky; this time as a gargle, and the sensation of ease and comfort following induced me to use it frequently, and in a few days I was completely cured.

The second case was as follows: I was called in consultation with Dr. Hoffmeister; found the patient, a boy of fourteen years, suffering the same as I had, only much weaker, and nearly black in the face, from suffocation. Remembering my own experience, I advised the use of stimulants internally, and the following gargle:—

℞. Potassa chloratis, ℥ ss
Alcohol,
Aqua rosæ, āā ℥ ij. M.
To be used frequently.

Immediate improvement followed. Since that time I have used the alcohol very freely in diphtheritic cases, and always with the most favorable results."

H. N. Burr, M.D.
Walworth, N. Y.

Suggestions in the Treatment of Traumatic Tetanus.

Ed. Med. and Surg. Reporter:—

On Friday, Nov. 18th, 1881, Thomas W. accidentally discharged his gun, carrying away the palmar portion of right hand and wrist. I was at once summoned, and found a fearfully lacerated wound, the flexors of the thumb, the palmar aponeurosis torn in shreds, and the tendons of the flexor muscles of the forearm were more or less involved. Although the destruction was very great, hemorrhage was at the mininum, the larger blood vessels—palmar arch, etc., seemed not to have been injured, therefore I resolved to make an effort to save the hand. I cleansed the wound, carefully adjusted the detached parts, applied bandages, introduced the catheter, and left my patient with instructions to take thirty drops opii. tinc., should he have pain. It was not needed; my patient rested easily. The two following days, a water dressing was used; after this carbolized oil, and I must say, that I never knew a wound to do better; suppuration was established, and when the bandages were removed, the injured part would be found bathed in a healthy, cream-like pus.

I was highly elated, thinking my patient would make a speedy recovery, but I was doomed to disappointment, for on the tenth day he complained of what he termed a cramping pain in the pit of the stomach, and some difficulty in deglutition. I recognized tetanus, and expected to find a change from the former healthy appearance of the injured part, but on removing the bandage, I found all in as good condition as I could wish—the usual quantity of healthy pus, rapid granulation, nothing like undue inflammatory action. Most surgeons tell us that, when tetanus makes its appearance, the wound has been in, or assumes at the time, an unhealthy condition. Dr. Abernethy, I think, relates a case where, after free suppuration, the spasm and rigidity disappeared, implying that it had been suspended during the attack; not so in my case. During the whole period in which there was the most violent tetanus, the wound progressed rapidly toward repair, the suppuration, and healing never for one moment ceased.

On the eleventh day since the injury I found Mr. W. in a very critical condition; tonic rigidity of the muscles of the neck; almost unbearable pain, especially severe inferior to sternum; jaws clenched; inability to swallow; risus sardonicus, and bathed in profuse perspiration. The mind was perfectly clear, and altogether he was a horrible spectacle. I will call attention to a prominent symptom, viz., an uncontrollable desire for water, of which he could not swallow a drop, or at least it would not enter the stomach, stopping, as he said, two-thirds the way down, where it would remain for a moment, and then be expelled with force. In the attempts to swallow, asphyxia would almost take place, and in my efforts to prevent strangulation I discovered something new, or, at least, new to me, and will give it, for the benefit of those who may be called to manage a similar case:—

My patient was choking, from a spoonful of water he had attempted to swallow. I placed my hand on the back of the neck, pushing the *whole body* well forward, hoping to thus empty the pharynx. Understand, I did not flex the neck, I pushed the whole trunk well forward, and, greatly to my surprise, he exclaimed, "It is gone," and sure enough the fluid had passed the cardiac orifice. Acting upon this hint, I immediately gave a dose of potass. bromide, pushed the *body* well forward; it passed into the stomach without producing strangulation, a hitherto impossible operation. By resorting to this manœuvre, food and medicines were administered for three days, or until relaxation took place sufficiently to allow deglutition in the usual manner. Fortunately for the community, and unfortunately for me as an investigator, tetanus is of such rare occurrence in my practice, that it may be years before I can prove or disprove the efficacy of this plan in other cases; but, as the plan is easily tried, I would advise all to give it a trial, and I would be pleased to hear the result.

I will not attempt to advance a theory; yet I have thought that in pushing the body well forward, a position was gained which favored the relaxation of the diaphragm sufficiently to allow the opening of the cardiac orifice, the seeming point of obstruction. The muscular fibres of the œsophagus seemed not to be affected by the spasm, at least not until the water had remained in it sufficiently long to produce it. I am content to let fine-spun theories alone, and rest satisfied with the truth, pure and simple. The administration of medicines and food by any other channel than the mouth is attended with considerable trouble and inconvenience, not saying anything about the shock to the modesty of a delicate female; therefore, if my experience in this case should hold good in others, the physician, as well as the patient, will be saved considerable annoyance. I adopted the following plan

of treatment, viz. :—For the first ten days, gave morph. sulph. per mouth and hypodermically, in sufficiently large quantities to mitigate the pain; on the second and third days, the morning of each, one grain of the drug was given hypodermically, and repeated in one hour; during the balance of the days, one fourth grain was given, on an average of every other hour. My instructions were to allay the pain without regard to the interval, and the nurses religiously followed directions. In addition, twenty grains potass. bromid. was given every third hour; ice to the spine, the application of which seemed very grateful to the patient. This plan was continued until relaxation began to take place, when twenty-grain doses of chloral hydrat. were substituted for the morphia; and I suspect after this substitution the recovery was more rapid. The bowels were occasionally moved with ol. tiglii and calomel. The final result was complete recovery.

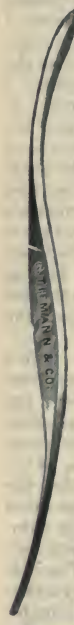
THEO. A. WORRALL, M.D.

Penna.

A New Dissecting Knife.

ED. MED. AND SURG. REPORTER :—

The instrument I bring to the attention of your readers is made from a rod of steel, 19 cm. long and 7 cm. square, tapered down on each side of the middle point, for a distance of 4 cm., to the thickness of a stiff spatula, the central spindle-shaped piece forming the handle. The ends of the rod, 5.5 cm. long, are forged into moderately thin, springy blades, one being sharpened at the point and along the edges for a distance of 3.5 cm., the other being rounded at the point, and not sharpened. All the edges and angles are carefully rounded and polished, the cutting edge, of course, excepted. The knife, as a whole, is bent into a double curve, making a clavicular shaped instrument.



This was devised for use in dissecting, and with it work may be done much more quickly and satisfactorily than with the ordinary scalpel. The knife is held like a penholder, the proximal end of the blade being held between the thumb and index finger, the back resting on the middle finger, the concave side being superior. The knife is very nicely balanced, and, owing to the shape of the handle and curve of the blade, can be firmly held and lightly held in the proper position, so that great precision may be obtained in its use, and a long sweeping cut can be made, using both point and edge; whereas in the scalpel, only the point is available, the strokes being short and the action being one of picking more than cutting. The blade of a scalpel is so set in the handle that it stands nearly vertical when held in the usual manner, and so the motion is limited to the fingers. In this knife the blade is so set in relation to the handle that we get a free action of the fingers and wrist; and as but little effort is required to hold it, the hand does not become cramped and tired.

It is especially useful in dissecting away the fascia, in following the course of nerves, arteries, and veins, and in separating individual muscles, especially the long muscles of the extremities and back.

The unsharpened blade is useful as an exploring probe and as an elevator, and is often more safely used than the sharp blade in dissections of the vessels. In demonstrating, it is useful as a pointer and elevator.

This instrument will be found of use in surgical operations. To make it more applicable to this purpose a small hole was made in the unsharpened blade near the tip, and a groove was made, running lengthwise of the blade, so that the probe could be used as a ligature carrier or director. In exploring sinuses and similar cavities the probe may be used to advantage as a sinus dilator, since there are no sharp edges to sever arteries or veins. For ligating arteries for aneurism, or veins for varices, the knife may be used for making the necessary incisions, and the other blade will serve to carry the ligature under the vessel. It is also useful in operations for lacerated cervix, for those of the mouth and throat, and many minor operations. Being forged from a single piece of steel, there are no crevices in which septic matter can lodge, and it is easily cleaned.

Boston, Mass. CHAS. EVERETT WARREN, M.D.

Investigations with Regard to School Children.

ED. MED. AND SURG. REPORTER :—

Having been for some time interested in the relations which obtain between brain growth and body growth, I undertook, with the sanction of a Committee of our Board of Education, an inquiry to discover, if possible, how prevalent, among the children in our higher public schools, were those symptoms which men like Drs. Day and Richardson, of London, and Drs. Thomas, Goodell, Hamilton, Beard, and others in this country, are wont to attribute, in no small degree, to the methods of intellectual training now standard in our schools.

The intention at first was, to secure information with regard to the large number (23 per cent. of the girls and 18 per cent. of the boys), that had withdrawn from one cause or another, from the High school, during the school year.

Later, it was thought best to gather, for purposes of comparison, information with regard to such recent graduates, and pupils still attending school, as lived in the immediate vicinity of those who had withdrawn, and who could thus be conveniently found.

Statements were thus obtained from the parents of two hundred and twenty-six pupils; forty boys who had withdrawn; ninety-six girls who had withdrawn; fifty eight girls still attending, and thirty-two recent graduates.

These statements showed that 37 per cent. of the boys and 75 per cent. of the girls had withdrawn, either wholly or in part, by reason of impaired health. Moreover, it appeared from these statements that, *while attending* school, many

pupils suffered from abnormal symptoms from which they were free, or nearly so, during vacation. The percentage is shown in the following table:—

While at School.	*Boys who left.*	*Girls who Left.*	*Girls still Attending.*	*Graduates.*
Health not so good	50	80	64	84
Lost appetite	23	46	38	38
Lost sleep	10	27	26	22
Had headache	45	72	55	69
Eyes weak	23	36	31	38
Eyes failed since entering	8	12	17	16
Had back or sideache	..	52	31	25
Had nervous troubles	..	44	36	66
Had hysteria	..	11	5	16
Complained of stair climbing	..	52	41	6
Menstrual symptoms known	..	42	30	13
Menses deranged while at school	..	62	57	46
Menses frequent or profuse	..	31	27	..
Menses scanty, irregular, painful	..	48	44	46

Cases where menses were both profuse and painful, were counted simultaneously in each class. As nervous troubles were classed hysteria, tremor, chorea, unnatural irritability, melancholy, etc., inquiry was made with regard to the amount of time pupils were in the habit of spending in study, outside of school hours. Also, with regard to the girls, what were their habits as to social recreation, etc. Collating the cases, as to hours of home study showed that for some reason, the girls habitually spent longer at their lessons than the boys. The ratio being as follows:—

Hours of home study	2	2-4	4-6	6
Boys, per cent.	25	65	5	3
Girls, " "	8	47	38	6

And that the percentage of abnormal symptoms increased among the 186 girls, as a rule, side by side with the increase of home study, thus:—

Hours of home study	2	2-4	4-6	6
Health power, while at school, per cent.	29	70	93	100
Lost appetite "	7	44	47	64
Lost sleep "	7	18	34	64
Had headache "	22	62	81	100
Had back or sideache "	14	34	54	45
Had nervous troubles "	7	31	61	91
Had hysteria "	—	5	19	18
Had eyes weak "	29	39	36	45
Failed since ent'g high school, "	14	13	18	17
Menstrual symptoms known, No	5	40	31	9
Menses deranged at school, per cent	20	50	81	33
Menses frequent or profuse, per cent	20	28	26	11
Menses scanty, irregular, painful, per ct.	—	35	71	33

Showing that so far as these 186 were concerned, the home study was an active factor in producing these symptoms. The better average health of those who indulged more freely in social recreation was almost equally marked.

Of course, so few cases cannot be cited as proving general laws, but they indicate a fruitful field for statistical inquiry, and it is to be hoped that the Board of Education here will conclude to continue the investigation, as has been proposed, till information shall have been obtained with regard to all who are at present attending our High Schools.

The remedy for these evils in our schools, evils which all acknowledge who have given the subject thought, lies in sytematic sanitary supervision of our schools by competent medical men. There must be some means provided, by which the physical effects of various systems of mental training can be thoroughly studied and regularly recorded.

The system which has been working so successfully in Brussels, Belgium, for the last seven years, should receive the careful consideration of students of sanitary science. By systematic medical inspection of the schools, they have been able to stamp out epidemics of the zymotic diseases among children.* And by special attention to those who, though able to attend school, are yet feeble, by reason of inherited dyscrasiæ; by regulating their brain work, and adapting their exercise to the needs of their physical condition, and by administering to such of them as are indigent, *cod-liver oil*, in the schools, they obtained, in two years, the following results†:—

Disease.	*Cured.*	*Better.*	*No. Treated.*
Scrofulous disease	72	156	286
Lymphatic "	34	263	366
Rachitic "	9	57	84
Anæmia	77	251	406
Chronic Bronchitis	6	4	21
Total	198	731	1163

Though their system, in all its details, would no doubt be unadapted to our American people, their results should prompt us to earnest effort to provide some efficient means to a like end.

L. B. Tuckerman, M D.

East Cleveland, Ohio.

Opium Habit.

Ed. Med. and Surg. Reporter:—

Gradually reduce the amount of opium taken and increase the amount of nutritious food and tonics. The indications of treatment are: 1st. Gradually reduce the dose. 2d. Relieve the great nervousness, insomnia, prostration and suffering. Bromide of potassium will not do this, because in these cases there is anæmia of the brain, and it is contraindicated in anæmia of the brain. It may cause a little sleep in very large doses, but these irritate the stomach, they also increase prostration and suffering. The same remarks apply to chloral. They should never be depended on alone. Probably, in extreme insomnia, rightly combined with other nervines, they may do; but alone, I have seen them cause delirium, and I think are sometimes dangerous in these cases, by increasing the anæmia. Veratrum viride will not answer the second indication, nor will coca. nor oxide zinc. Nit. amyl is reported to do well and cause sleep; curara might be tried. If some medicine were discovered that had the same stimulant, excitant, exhilarating and sedative effects as morphia, and being a tonic without having any deleterious effects like morphia, nor checking the secretions and nutrition, it

* Congrès International d'Ensignement Rapport. de M. Le Dr. Janssens, Bruxelles, 1880

†Congrès International d'Ensignement. Rapport de M. Le Dr. Bonmariage: Bruxelles, 1880.

would answer admirably as a morphia antidote. The following combination comes as near it, and meets the second indication better than anything I have seen:—

℞. Con. tinct. cannabis indica, gtt. 10
Narcotic.
Con. tinct. cypripedium, gtt. 15
Anti-spasmodic, nervine, tonic, narcotic, diaphoretic.
Sulphate hyoscyamia, gr. $\frac{1}{48}$
Soporific, sedative, narcotic diuretic, and laxative.
Con. tinct. humulus lupulin, gtt. 15
Nervine, hypnotic, febrifuge, diuretic and tonic.
Con. tinct. lycopus, gtt. 20
Astringent, styptic, sedative, and tonic.
Con. tinct. pulsatilla, gtt. 5
Nervine.
Con. tinct. hamamelis, gtt. 15
Astringent, tonic, sedative.

Mix above thoroughly, and as Shakspeare says, all the sedative herbs of the world will "Medicine him to sleep." I have tried above, and know it will do. It will entirely substitute the morphia. They are B. Keith's concentrated tinctures. Dose of above, gtt. 10 to 1 to 2 ʒ s.

To meet the third indication, to build up patient's strength and fatten him, give tonics of iron, phos., strychnia, etc., and give him hydroleine. Adopt Dr. Weir Mitchell's system of excessive feeding, and fatten him. Give as much good food (and often) as the stomach will bear.

JOHN M. WHITE, M.D.

Picrotoxine in Night Sweating.

ED. MED. AND SURG. REPORTER:—

During my last two terms of service at the Episcopal Hospital, I have exclusively employed the active principle of cocculus indicus, picrotoxine, in the treatment of night sweating in phthisis and other diseases. My success with this substance has been so decided, so far superior to that previously obtained by the mineral acids, belladonna and ergot, singly and combined, that I can no longer postpone the public expression of my opinion concerning it.

My attention was first called to this use of the drug by a quotation from an article in the *Practitioner*, by Dr. William Murrell, who, after extended trial, found it the best substance he had ever employed for night sweating. The dose used by Murrell was from gr. $\frac{1}{120}$ to gr. $\frac{1}{60}$; the latter amount, four times a day, being the largest dose administered by him. My custom has been to give a pill containing gr. $\frac{1}{60}$ at bedtime, which dose may be repeated once or twice during the day in obstinate cases, and, at my suggestion, the firm of McKesson and Robbins, of New York, have added such a pill to their list.

As above intimated, I have not employed this drug solely in the night sweats of phthisis. I recall a case of chronic pleurisy in which, the effusion having been absorbed, convalescence was unaccountably retarded and prostration was so extreme that a latent, incipient phthisis was suspected. The skin was bathed in perspiration during the greater portion of the twenty-four hours, and this being the only discoverable morbid condition, I resolved to treat it with picrotoxine. It was promptly checked and convalescence set in immediately.

I have employed the drug in nearly one hundred cases.

Philadelphia. FREDERICK P. HENRY, M.D.

Ophthalmia.

ED. MED. AND SURG. REPORTER:—

I desire to communicate to the profession, through the medium of your most worthy periodical, a simple, but effective mode of treating scrofulous conjunctivitis. The patient, a lady, Mrs. C., age 23, the mother of one child, of scrofulous diathesis and nervo-sanguine temperament. She had been subjected to repeated attacks of violent sore eyes; in fact, her eyes have not been perfectly well in ten years until quite recently, though her general health has been excellent. The present attack began about the first of April, 1881, and continued almost to complete blindness, until November 25th, 1881, when I began treatment by directing strict dietetic and hygienic regime. They had essayed every available remedy without benefit, and had concluded that she was doomed to eternal darkness. I administered the following simple receipt, per orem:—

℞. Pot. iodidi, ʒ ss
Syr. sarsar. co., ℥ viij
Tinct. cincho. co., ʒ ij
Aqua pluvialis, q.s. ad Oj. M.
Cap. coch. mag. ter. die.

I ordered the following collyrium to be applied to the eyelids, twice daily:—

℞. Zinci. sulph., gr. v
Aqua pura., ʒ j.
Ft. sol.
Use as directed.

The above was the entire therapeutics of the case, which improved rapidly, ab initio, and she is now, December 25th, 1881, perfectly well, and can see as well as she could before the first attack.

Although an isolated case does not constitute a substantial criterion, I am confident that the above was not a mere recovery, but an absolute cure. A. M. HATHCOCK, M.D.

Hickory Valley, Ark.

Multiple Births.

ED. MED. AND SURG. REPORTER:—

The papers seem to be somewhat excited over the fact that a Mrs. Casey, of New York, has given birth to three boys. Well, this is all well enough, for such cases are not common, and boys are rather scarce; but this is not by any means the first case of the kind. I know of a case that I have often thought ought to be reported, but so far as I can learn, it has never yet been reported.

A Mrs. Howitt, of Drumore Township, Lancaster Co., Penna., gave birth to three healthy boys—the three weighing, according to my recollection, twenty one pounds—in May or June of the year 1856. When I visited that neighborhood in 1876, I made inquiry concerning the boys, and I was informed that they were all living and doing well. Triplets usually do not live many months, but these boys were twenty years old in 1876, and I have not heard of the death of any of them since. George T. Dare, M.D., was the accoucheur on that occasion. Dr. Dare resides in Oxford, Chester Co., Penna.

Some twelve or fourteen years since, a lady in Fayette, Howard Co., Mo., gave birth to four children, two boys, I believe, and two girls. Two of them died in two or three weeks, and so far as I have learned, the other two are living now.

Maryville Mo. JOSEPH B. MORRISON, M.D.

The Vaccination Question.

ED. MED. AND SURG. REPORTER:—

In the discussion on vaccination, in your journal, E. M. S., says: "I know that some persons are *temporarily insusceptible* to the effects of vaccine virus. As a proof of this, I wish to make the following statement: In the spring of 1881 I vaccinated a lady and myself, both from the same "ivory point;" (both of us had been vaccinated in childhood). She *did not* take; mine *did*, beautifully.

In December, 1881, there being a case of smallpox in the town, I concluded to vaccinate again. The lady was anxious to try the experiment, and I vaccinated, as on the former occasion, both from the same "point;" the result was, mine *did not* take, hers *did*. This shows conclusively that some change had taken place in the lady's system, after the operation of the spring of 1881, or the result in the autumn or winter of the same year would undoubtedly have been similar.

I have in my mind the case of a lady upon whom vaccination would never take, the operation having been performed many times. On one occasion the skin was opened and the virus inserted, without any effect whatever. This lady's brother has two children that I have vaccinated five times, each, without any good resulting. I would ask, can the insusceptibility be transmitted? THEO. A. WORRALL, M.D.

Northeast, Md.

NEWS AND MISCELLANY.

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service, October 1st, 1881, to December 31st, 1881.

Hebersmith, Ernest, Surgeon. Relieved from duty at San Francisco, Cal., and placed on waiting orders, Nov. 7th, 1881. Relieved from waiting orders, Nov. 26th, 1881.

Vansant, John, Surgeon. Granted fourteen days' leave of absence, Oct. 18th, 1881. To proceed to San Francisco, Cal., and assume charge of the Service at that port, Nov. 8th, 1881.

Miller, T. W., Surgeon. Granted leave of absence for seven days, Oct. 6th, 1881.

Purviance, George, Surgeon. To proceed to Boston, Mass., and assume charge of the Service at that port, Nov. 8th, 1881.

Austin, H. W., Surgeon. To proceed to Galveston, Indianola, Corpus Christi, and Brownsville, Texas, as inspector, Oct. 17th, 1881.

Fisher, J. C., Passed Assistant Surgeon. To proceed to Yorktown, Va., as inspector, Oct. 14th, 1881. Detailed as member of Board for the Examination of Keepers and Crews of the Life Saving Service, Third District, Nov. 18th, 1881.

Goldsborough, C. B., Passed Assistant Surgeon. Detailed as member of Board for the Examination of Keepers and Crews of the Life Saving Service, Fifth and Sixth Districts, Nov. 2d, 1881.

O'Connor, F. J., Assistant Surgeon. Granted leave of absence for fifteen days, on account of sickness, Dec. 23d, 1881.

Guitéras, John, Assistant Surgeon. Granted leave of absence for ten days, Dec. 5th, 1881.

Benson, J. A., Assistant Surgeon. Granted leave of absence for twenty-one days, Dec. 7th, and 21st, 1881.

Banks, C. E., Assistant Surgeon. To assume temporary charge of the Service at San Francisco, Cal., until the arrival of Surgeon Vansant, Nov. 7th, 1881.

Carmichael, D. A., Assistant Surgeon. To proceed to Baltimore, Md., for temporary duty, Nov. 2d, 1881. To rejoin his station (New York), and thence proceed to Pittsburgh, Pa., and assume charge of the Service at that port, Nov. 18th, 1881.

Bennett, P. H., Assistant Surgeon. To proceed to Boston, Mass., for temporary duty, Oct. 21st, 1881.

Peckham, C. T., Assistant Surgeon. To report for temporary duty to Surgeon-in charge, Boston, Mass., Oct. 21st, 1881. To proceed to Vineyard Haven, Mass., for temporary duty, Nov. 4th, 1881. To rejoin his station (Boston), and thence proceed to New York, reporting for duty to Surgeon-in-charge, Nov. 9th, 1881.

Ames, R. P. M., Assistant Surgeon. To proceed to St. Louis, Mo., for temporary duty, Oct. 21st, 1881. To proceed to Evansville, Ind., for temporary duty, Dec. 24th, 1881.

Devan, S. C., Assistant Surgeon. To proceed to San Francisco, Cal., for temporary duty, Oct. 21st, 1881.

Urquhart, F. M., Assistant Surgeon. To report for temporary duty to Surgeon-in-charge, New York, N. Y., Oct. 21st, 1881.

APPOINTMENTS.

The following candidates, having passed the examination required by the Regulations, were appointed Assistant Surgeons by the Secretary of the Treasury, Oct. 20th, 1881:—

Philo H. Bennett, M.D., of New York.
Cyrus T. Peckham, M.D., of Massachusetts.
Robert P. M. Ames, M.D., of Pennsylvania.
Spencer C. Devan, M.D., of Missouri.
Francis M. Urquhart, M.D., of New York.

Philadelphia Centenarians.

The *Public Ledger* of this city keeps a record of persons of unusually advanced age who pass from among us. The following are its comments:—

The deaths of 13 centenarians were recorded in the *Ledger* during the year (4 more than in 1880); of these there were 10 women and 3 men, Annie Granleas, Kate Kelly, and Rachel Mahorn, aged 100; Mary Winn, 101; John Monaghan, Hugh Lynch, Mary Miller, and Sarah McKay, 102; Elizabeth Quin, 104; Daniel Webster, 105; Hester Reckless, 105; Margaret Gasaway, 106; Daffy Burton, 115. Six of these died during the first half of the year, and have heretofore been noticed. The others are Annie Granleas, widow of the late Thomas Granleas, who died suddenly, September 12, aged 100 years; she was buried from the residence of her grandson, William Rahlfing, on September 16; Mary Miller, who died November 14, at the residence of her son, John N. Miller, No. 1231 South Thirty-first street, aged 102 years. She is said to have boasted that she once cooked a breakfast for General Washington, but that is hardly likely, unless she learned cooking very young. Catharine Kelly died November 26, aged 100 years, at the residence of her daughter, 207 Diamond street. Mrs. Kelly was a native of county Derry, Ireland; she came to this country in 1853, and was the mother of eight children. Margaret Gasaway died on December 6, aged 106 years. She was a member of the Society of Friends, and came here from the Eastern Shore of Maryland, while she was quite young. Mary Winn died December, 23, aged nearly 101 years. She was a native of the old District of Northern Liberties, where she lived all her life, her husband, Jacob Winn, being one of the old-time night watchmen. She was the mother of ten children, the oldest survivor of whom is a daughter over 73 years old. Rachel Mahorn, widow of John Mahorn, died December 10, aged 100 years. She was born in Salem County, N. J. She left 3 children, 20 grandchildren, and 23 great-grandchildren. Daniel Webster, colored, died December 25, aged 105 years. He left 4 children, 13 grandchildren, and 13 great-grandchildren.

OBITUARY NOTICES.

PROF. JOHN W. DRAPER.

This eminent scientist died January 4th, in his seventy-first year. He was better known as a physicist than as a physician. He was born near Liverpool, England, but removed in early life to this country, and graduated in 1836, in the University of Pennsylvania, where he took the degree of M. D., with the rare distinction that his thesis was selected for publication by the medical faculty. A few weeks after his graduation he was appointed Professor of Chemistry, Natural Philosophy and Physiology, in the Hampden-Sidney College, Virginia. During his residence there he was much occupied with scientific investigations, many of his physiological discoveries being communicated to *The American Journal of Medical Science*. In 1839 he was called to the chair of Chemistry and Natural History in the academic department of the University of the city of New York, where, besides instruction in those branches, he delivered lectures to the advanced under graduates on physiology. In 1841 he was appointed Professor of Chemistry in the University Medical College, and in 1850 physiology was added to the chair of chemistry. Dr. Draper was long president both of the scientific and medical departments of the University.

He was the author of many literary works, reviews, etc.; a Treatise on the Forces which Produce the Organization of Plants (1844); a Textbook on Chemistry (1846); and another on Natural Philosophy (1847), which consists of excerpts from his courses of lectures; and of a treatise on Human Physiology (1856), many editions of which have been published. His "History of the Intellectual Development of Europe" appeared in 1852, and was almost immediately afterward republished in England and translated into French, German, Italian, Polish and Russian. It has always been an extremely popular work, and has gone through many editions in this country. In 1865, four lectures which he had delivered before the New York Historical Society were collected in a volume, under the title of "Thoughts on the Future Civil Policy of America;" and between 1867 and 1870 appeared, in three volumes, his "History of the American Civil War."

In some respects his most important work was "The Conflict between Science and Religion," which attracted great attention, it may be literally said, all over the world, and was translated into all the principal languages. It is the claim of Dr. Draper's friends that he is more widely read and appreciated than any other American scientist. Prof. Tyndall, in his famous address before the British Association at Belfast, quoted largely from Dr. Draper's works, and the kindly feeling between these two eminent men was great. Dr. Draper's last work was "Scientific Memoirs," published in 1878, containing a narrative of an extensive series of experiments made in the University of New York by its author, on various chemical and physical topics, between 1830 and 1870, chiefly in connection with light, radiant heat, and electricity.

—Dr. Edward Reynolds, the oldest physician in Boston, died, December 27th, at the age of 89 years. He was graduated from Harvard College in 1811, and was a classmate of the late Edward Everett, the late Chief Justice Dunkin, of South Carolina, and the late Chief Justice Lane, of Ohio.

MARRIAGES.

CRAWFORD—BARCLAY.—December 22d, 1881, at the home of the bride, by Rev. W. W. Moorhead, Dr. J. Shoenberger Crawford and Miss Isabella J., daughter of the late Th. J. Barclay, of Greensburg, Pa.

DEATHS.

DRAPER.—At his residence, at Hastings-on Hudson, on Wednesday, January 4th, 1882, John W. Draper, M D., LL.D., in the 71st year of his age.

STONG.—On Wednesday evening December 28th, 1881, Philip Stong, M. D., in the 39th year of his age.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1299.] PHILADELPHIA, JANUARY 21, 1882. [Vol. XLVI.—No. 3.

Original Department.

Lecture.

PERICARDITIS.

BY AUSTIN FLINT, M.D.,

Professor of Principles and Practice of Medicine in the Bellevue Hospital Medical College, New York.

Gentlemen:—This patient presents a disease which is not so frequently seen in the hospital as are many other affections, namely, pericarditis, or inflammation of the investing membrane of the heart. I will read the history and make some comments upon the case.

John —, twenty-five years of age, a steward, a native of Ireland, admitted into the hospital on the 23d of this month. The family history is unimportant. He had never been ill, as long as he could remember; never had syphilis; is not accustomed to hard drinking; usually has drank one or two glasses of beer a day, with his meals; sometimes port wine. Three days before his admission he had a pain in his right foot, near the heel, and soon after noticed that the ankle and the foot were swollen. The swelling increased, the parts became red and hot, and extremely painful, especially on motion. Two days later the knee began to be affected with slight pain. At that time he thought he had some fever.

On his admission he complained of swelling and tenderness in his foot and some pain in the knee. The swelling was confined to the tarsal region, which felt hot to the touch and was very tender. There was no swelling of the knee, and the pain seemed to be more in the tendon than in the joint. The pulse was 90, full and soft, and the temperature 99° F.

Auscultation of the heart gave no evidence of any disease there. I wish to call your attention to the fact that the history gives no evidence that he ever before had acute rheumatism, while it does show that at the present time he has an attack of subacute articular rheumatism, limited to a few joints.

He was placed upon the following treatment: The salicylic mixture, half an ounce, containing salicylic acid, twenty-two and a half grains, in solution, every three hours; the bicarbonate of soda, half a drachm every three hours; lead and opium wash applied to the knee. I wish, here, to impress upon you, when using salicylic acid or salicylate of soda, which is now the general treatment of rheumatism, that it is important also to use the alkalies in sufficient quantity to render the urine as speedily as possible alkaline, with a view to diminishing the liability to the cardiac affection. Two days after his admission the swelling and pain in the foot were much diminished.

Now, the question arises, whether that treatment may not have prevented the further development of the rheumatic affection. We could probably answer that in the affirmative. On the third day after admission there was scarcely any pain in the foot, and last night there was no murmur to be heard in the cardiac region.

Now, this case furnishes occasion for impressing certain practical points. We shall see in a moment that we have evidence of endocarditis, that evidence consisting in the development of an endocardial murmur which we know did not exist before. Endocardial murmurs found after previous attacks of rheumatism, and other causes, are very common, and we cannot decide positively that endocarditis developed during the progress of a given attack of rheumatism, unless we were able to exclude its presence before.

On the 24th it is stated, that last night no murmur was to be heard over the præcordial region, but this morning there is a double friction murmur heard, with the greatest intensity at the left edge of the sternum, at its junction with the fourth costal cartilage. The sound is close to the ear, and is increased in intensity when the patient leans forward. A full respiration also increases the intensity, and raises the pitch.

Of course, the remarks which I have made about endocarditis do not apply to these symptoms; but it is fair to assume that this affection was also present, since, as I believe, it always accompanies rheumatic pericarditis.

In the afternoon, it is further stated, the murmurs had increased somewhat in intensity. The heart's action was then somewhat labored, and the first sound was indistinct. The murmur then became perceptible over both sides of the sternum. The area of superficial cardiac dullness was increased, the murmur became less intense, and pain disappeared. On the 27th, it is noted that the murmur was much diminished in intensity, the heart's action was still labored, the first sound very indistinct, and the apex beat diffuse. The percussion area of dullness was thought to be increased on a line between the nipples. On the 28th the murmur was still further diminished, the area of cardiac dullness increased, extending now about an inch to the right of the sternum, and to just beyond the left nipple on the same level. On the 29th the double murmur had disappeared, and a systolic murmur had occurred at the apex, but it was not transmitted.

This last statement contains evidence of endocarditis, or inflammation of the endocardium, and, indeed, is positive proof thereof, the absence of such a murmur having been determined beforehand. This murmur is produced by a certain amount of exudation within the left ventricle of the heart, there being no insufficiency of the mitral valve. It would not be strictly proper, therefore, to call it a mitral regurgitant murmur. The terms mitral systolic murmur without regurgitation, or an intra-ventricular murmur, distinguish it from a mitral regurgitant. As the term implies, it is heard with the first sound, and is located at the mitral valve, but it does not denote insufficiency of that valve.

Here, then, we have a case of rheumatic peri- and endo-carditis, occurring a few days after the commencement of a rheumatic affection. The rheumatic affection not presenting symptoms of sufficient intensity to be called acute, affecting only one, or at most two joints, and apparently readily and directly controlled by salicylate of soda. It occurs here to still more strongly impress upon your minds the importance of giving alkalies. Had this patient taken at the outset alkalies in sufficient quantity to render the urine alkaline, I think it is fair to say that the probability is he would not have had these murmurs. I will not say positively that he would not have had them, for the opinion of Mr. Fuller (who wrote many years ago), that rheumatic pericarditis never occurred as long as the urine was kept alkaline, was too strongly stated; we may say, however, that the liability to pericarditis is much diminished as long as the urine is kept alkaline. And here is another point which renders this case very instructive, namely, that while the salicylate of soda controlled the rheumatic affection, it did not prevent the affection of the heart, and since that remedy, salicylate of soda, has come into use, and has led, as it often has done, to the disuse of alkalies, cardiac affections have become much more common than before. I know, from personal observation, that we meet now with cardiac affections in rheumatism more frequently than we did when the alkaline treatment was relied upon, and the object of chief importance in the treatment of rheumatism is prevention of the cardiac affection, although it is, of course, desirable, if possible, to cut short the affection of the joints. But there is no such important consideration pertaining to the joint affection as there is to cardiac complications. Therefore, while it is perfectly proper, and indeed very important, to control the rheumatic affection by these remedies, we should not discontinue the use of the alkalies which reduce the liability to an affection of the heart. These points are so well illustrated in this case that I hope they will be borne in mind.

The pericarditis in this case is devoid of any apparent symptoms of gravity. It is one of those diseases which vary very much in different cases, as regards pain and other distressing symptoms, and symptoms of gravity. This patient is in bed, but had he been allowed his own will, he would have walked up to the amphitheatre. It is not proper for a patient with some pericardial effusion to take considerable exercise. That is an important practical point. He should take rest. I have known of at least two instances of sudden death, arising, apparently, from imprudent exercise during the presence of pericardial effusion.

Pain is sometimes exceedingly severe, having all the characteristics of pleuritic pains, and hence, when physicians relied wholly upon symp-

toms in diagnosis, cases of pericarditis were sometimes confounded with pleurisy. The pain is lancinating, sharp, of course, situated within the præcordium, and is increased on inspiration. In other cases there is little if any pain at all; not sufficient to call attention to the existence of any inflammatory symptoms at the pericardium. That is true, also, of other serious inflammations, as, for instance, acute pleurisy. Cases differ also with respect to the amount of the effusion; sometimes it is slight and inappreciable, in which event we distinguish the case as one of dry pericarditis. In other cases the effusion is moderate in quantity, in others considerable. In proportion to the amount of the effusion we have other symptoms dependent upon the effects of this, first upon the heart, and then upon adjacent organs. Of course, in proportion to the amount of the effusion the heart is compressed. It labors under mechanical disadvantages, hence, frequency or smallness of the pulse: hence, disturbance of respiration. Then, pressure by the enlarged pericardial sac upon adjacent organs sometimes occasions inconvenience. It presses upon the lung, and diminishes somewhat the lung capacity; it may press upon the œsophagus and thus interfere with deglutition.

In the vast majority of instances in which we meet with pericarditis, it occurs in connection with one of three affections, namely: first and most frequently, rheumatism—rheumatic pericarditis; next, perhaps, chronic Bright's disease; next, in connection with either pleurisy or pneumonia, affecting the left side. It is in these three pathological connections that we most frequently meet with pericarditis. The instances in which it occurs otherwise, including, of course, traumatic cases, are very few. It is very apt to be overlooked in connection with pleurisy and pneumonia, because we diagnose the presence of those diseases and think we have enough to account for the symptoms, and perhaps, omit to examine with reference to pericarditis.

As to the physical signs, I need not, I suppose, dwell upon the friction murmur. That is evidence of pericarditis, and also of pleurisy in the first stage. It is not, however, always found, even in the first stages of pleurisy, whereas in pericarditis I think I am safe in saying it is always present before much effusion has taken place. The movements of the two serous surfaces upon each other are such as to give rise to a murmur if the conditions for it be present, namely, a fibrinous exudation.

In order to be able at once to recognize the murmur, we must bear its characters in mind. Let us repeat them. In the first place, the friction murmur is almost invariably double; that is, it accompanies the two sounds of the heart, although it has not a fixed and uniform relation to them. They are, so to speak, in discord with the sounds of the heart, but there are two for each revolution. They convey to the mind the idea of friction. This in itself should not be relied upon in the diagnosis, for endocardial murmurs sometimes have that character. They seem to come from a superficial situation, right under the ear, or under the surface. They are increased in intensity when pressure is made over the præcordia with the ear or stethoscope. They are not conducted beyond the præcordia much, if at all, and are frequently heard only within a certain portion of the præcordia. These are characteristics of the pericardial friction murmur, as contrasted with an endocardial murmur. Endocardial murmurs, in order to be confounded with a pericardial friction murmur, must be double, since the pericardial murmur is double, and the only instance in which this error can be committed holds with relation to the aortic direct and the aortic regurgitant murmurs. The diagnosis can be made in that case by paying attention to the qualities of the endocardial murmurs, the conduction of the aortic direct up into the great vessels, etc.

After the effusion has been poured out into the pericardial sac, as in this case at present, the murmur disappears, and if we see the case for the first time at this stage, we have to depend upon other signs for our diagnosis. Removal of the heart from contact with the thoracic wall, by the presence of fluid in its investing membrane, alters the first sound, diminishes its intensity, and divests it of its booming quality. It becomes valvular, in that respect being like the second sound, and frequently being more feeble. This change is a very striking one, and was illustrated in the following case. Some years ago, when again about to commence my visiting service in the wards of the hospital, and while passing through, one of the assistants said, regarding a certain patient, that it was a case of rheumatism, a light attack; but, as a matter of curiosity, more than anything else, I put the stethoscope over his heart, and at once recognized the fact that the first sound was like the second, being valvular in quality. A further examination proved the presence of pericarditis with effusion, which had entirely escaped attention, because there was no pain or other symptoms pointing to it.

If the apex beat be above the normal position it is a diagnostic point in favor of pericarditis

with effusion. Sometimes it can only be felt by requiring the patient to lean forward, so that the apex may come in contact with the thoracic parietes. In this patient, the apex beat is in the fourth intercostal space, instead of in the fifth, which is indicative of some of the effusion still remaining within the pericardium. The presence of the effusion is further determined by percussion and auscultation, the former showing an increased area of dullness, and the latter an increased area over which there is absence of respiratory murmur. Increased area of dullness in the præcordial region, caused by pericardial effusion, is diagnosed from that caused by enlargement of the heart in this manner. In the latter the increased area of dullness extends more downward and to the left, while in the former the area of dullness is increased laterally, nearly equally on the two sides, and upward, and the triangular form of the area of dullness, corresponding with the form of the pericardium, is evident on percussion and auscultation. The apex beat, instead of being lowered, as in enlargement of the heart, is higher up than normal, in effusion into the pericardium.

The treatment of pericarditis varies considerably according to the amount of the effusion and the intensity of the inflammation, as denoted by the general and local symptoms. I have already spoken of the importance of quiet, which is an essential point in the treatment. If the patient suffer from a considerable amount of effusion, it is proper to treat it as we would effusion into the pleura, viz: we may give hydragogues; but always remember that this must not be carried to the extent of producing any considerable general debility. We may give diuretics. Sometimes blisters over the præcordia have a beneficial effect. I do not know that we can explain how it is done, but facts show that vesication of the skin lying over serous membranes aids in producing absorption of the contained effusion. I suppose a certain amount of benefit pertains to the application of the tincture of iodine externally. The patient, of course, is to be sustained by measures which do not excite the action of the heart, but which improve the constitutional power. If pain be a prominent symptom, of course that is to be relieved by the judicious use of opium in some form. We should continue the use of alkalies, and in that way, perhaps, keep the inflammation from increasing. A less quantity of the alkalies will be required to continue the urine alkaline than was required to produce alkalinity in the first place. These are the more salient points in the treatment of this affection.

Rheumatic pericarditis gives us a good ratio of recoveries. The prognosis, if there be no untoward circumstances, is favorable. Renal pericarditis, if we may so distinguish it, is quite otherwise. A very large majority of these cases prove fatal. Pericarditis occurring in connection with pleurisy and pneumonia, increases very much the gravity of those affections, and proves fatal in a considerable proportion of cases, although its presence does not warrant us in forming a fatal prognosis.

In the present case it is only important to keep the urine alkaline, and to prevent the patient from making those exertions which he seems inclined to do because he feels pretty well and has no local symptoms.

Asthma, Emphysema, Bronchitis.

The hospital record of the next case, gentlemen, is asthma, emphysema, and bronchitis, three affections which, as we have seen, are apt to be associated. The patient is a boy, thirteen years of age, a native of New York, who entered the hospital on the 28th of this month. His father had been subject to attacks of dyspnœa, coming on at night, for nearly twenty-eight years, and from that statement we may infer that his father suffered from asthma. This is one of the diseases into which heredity frequently enters as a cause. No other member of the family has been affected, although he has several brothers and sisters. Here we see an illustration of what we often see, that where heredity does enter into the causation of the disease, it may affect only one of a numerous family, the others escaping.

The personal history of the patient states that for more than seven years he has been subjected to attacks of difficult breathing. Here is an interesting point; that while asthma does commence early in life, especially in the inherited form, it is not common for it to commence as early as in this case. This boy was only six years of age when he began to have attacks of difficult breathing.

The attacks came on in the night, and generally lasted a part or all of the next day. At first they came on once a month, and he was sometimes free from them during three or four months. Two years ago he went to Kansas to live, and was there free from his trouble during several months. That part of our country, and more particularly Colorado, has been considered favorable to these affections. About eight months ago he returned to New York, and since then he has had an attack nearly every week. It is interesting to note this statement in connection with what was just previously stated.

He has had a cough as long as he can remember, and has had difficult breathing on very slight exertion.

Physical Examination.—On inspection, there is to be noticed a well marked deformity of the chest, the upper anterior portion bulging forward, the lower portion being retracted, particularly below the sternum. On inspiration the sternum rises vertically. The impulse of the heart is seen and felt in the epigastric region. On percussion in the infra-clavicular region the note is vesiculo-tympanitic. On auscultation over the upper part of the chest, most markedly in front, the inspiratory sound is weakened and short, the expiratory sound is prolonged and low pitched. There are a few mucous râles over the chest, varying in position, and also sonorous râles.

The patient was placed upon tonics and an emulsion of cod-liver oil, and should dyspnœa come on, he is given the fluid extract of quebracho, fifteen minims every hour, this being a new remedy, supposed to have a good influence upon dyspnœa occurring under different circumstances.

When we look at the boy's chest, we see that it has not exactly the deformity of emphysema, the barrel-shaped appearance which we have seen in other cases. This patient's breast looks more like what is commonly known as "chicken breast." The pulsation of the heart is seen in the epigastric region, as stated in the history. This might be due to emphysema affecting the left upper lobe, but on examination I find enlargement of the heart, principally of the right ventricle, with a loud pulmonary second sound, and this probably is the chief cause of the descent of the apex beat. I also hear sonorous râles, which are likely to be heard in cases of asthma, even at times when the patient is free from an attack. As the patient breathes deeply, we see the characteristic movements of emphysema; there is elevation of the whole chest, with some retraction of the lower part of the chest on inspiration. Vesiculo-tympanitic resonance is heard over both upper lobes, greater in degree, however, over the left than over the right lobe, which is the rule, with very few exceptions.

Since there is no valvular lesion present it is fair to attribute the enlargement of the right side of the heart to the presence of emphysema.

We have not time to consider the treatment of this case to day.

—The Danish Society for the Protection of Animals offers two prizes for the best essays on Vivisection. The question to be treated is the replacing, for medical experiments, of living animals by those freshly killed.

Communications.

SOME POINTS IN REGARD TO TROPHIC NERVE CELLS.

BY J. S. WIGHT, M.D.,

Professor of Surgery at the Long Island College Hospital.

Written for the Medical and Surgical Reporter.

(*Continued from page* 35.)

The third case reported on page 443, of the Surgical History of the War of the Rebellion, reads in substance as follows: Private W. S. L., 32 years of age, was wounded December 10th, 1864, by a conoidal ball, which entered the back on the left side, about three inches below the inferior angle of the scapula, fractured the eleventh and twelfth ribs, passed directly across the back, between the last dorsal and the first lumbar vertebræ, both of which it fractured, as also the eleventh and twelfth ribs on the right side, and lodged under the skin at a point almost corresponding to that of its entrance on the opposite side. The lower extremities were instantly paralyzed. The ball was readily extracted. There was slight hemorrhage, and considerable shock, with pain in the right lung. The urine was drawn off by the catheter, and the patient had an involuntary evacuation from the bowels. The bladder had to be emptied by the catheter, and the bowels evacuated themselves. There was some pleuro-pneumonia. About ten or twelve days before his death the tissues over the right trochanter, and for a short distance down the thigh, began to slough away. The sloughing continued until the trochanter was exposed, and commenced over the sacrum and left trochanter, although he did not suffer the least pain. At the autopsy it was found that the ball had passed directly through the cord, cutting it off.

Attention may now be drawn to some significant points in regard to this case:—

(1) There was no direct injury to the ganglia of the sympathetic. The disturbance to the sympathetic nerve cells must have been by the way of indirect irritation. The coördination and the correlation between certain spinal cells and certain sympathetic cells must have been completely destroyed. There may have been some spinal cells, that in their mutilated condition were still connected with the cells of the sympathetic, yet their influence on the cells of the lumbar ganglia would be in the line of irritation—in the nature of in-coördinate cell action.

(2) The lumbar enlargement of the cord was

severed, or cut off entirely, so as to cause complete paralysis of sensation and motion below the seat of the injury, and yet the involuntary motion to some extent still continued. At the same time it must be admitted that the cells of the severed end or part of the cord had some motor properties still left for a few days, so that there would be, to some extent, a coördination of spinal and ganglionic functions.

(3) The lumbar enlargement of the cord is said to be a trophic centre, that is, it is said that there are trophic cells in the anterior horns of gray matter, and that this is so we may admit, only we think it prudent to add that part of the trophic work is probably done by the cells of the lumbar ganglia. for it would be quite as competent to say that an injury to the spinal cells would irritate the co-related cells of the sympathetic ganglia, as it would be to say that an injury to the cells of the sympathetic ganglia would irritate the co-related cells of the spinal cord, and this would be more especially so in the present case, if it were not so in some other case, because of the nearness of the track of the ball to the tissues about the special elements of the sympathetic.

The necrosis of the tissues of certain parts of the body below the seat of the injury was caused by the injury in both of the above cases: (1) In the first case the injury was done to the lower sympathetic ganglion of the neck, and the implication of the cilio-spinal axis was no doubt indirect. (2) In the second case the injury was done to the lumbar enlargement of the cord, and the implication of the ganglia of the lumbar sympathetic was probably indirect. It is true, that we have no direct observation, as a matter of fact, in regard to the autopsy going to show that the cells of the lumbar sympathetic had suffered on account of the injury to cells of the cord, and yet it is highly probable that these cells did suffer, and that they had an influence in causing the necrosis of the sloughing tissues.

It is true, indeed, that nutritive activities take place in some organic forms in which there are no nerves; plants and some of the protozoa, have no nerves, and yet they develop and grow. *Nor do plants and certain protozoa have livers and kidneys;* but if they had such organs differentiated for them, why they certainly could not get along without these organs, and yet these organs are, in fact, made up of cells that have special and peculiar functions; and so are spinal cords and sympathetic ganglia made up of cells, which we call nerve cells. To be sure these cells have special processes, which we call nerves, but these processes are parts of the cells. To say that a protozoa, or a plant, can be nourished without nerves, has no weight in showing that the nerves of a highly organized being can be nourished without the intervention of nerve cells. To say that there are no nerve cells in the early life of the embryo, does not disprove any connection that exists between the adult nerve cells and the nutrition of certain other cells of the human body. Why, it ought rather to be said that a nerve cell is a special cell, doing special work, just as we know that a liver cell is a special cell doing special work. In fact, we know that in the nerve cell itself the most active nutritional changes are taking place, and that, in so far as nutrition is concerned, a nerve cell is very much like any other cell; in fact, the analogy, in this respect, of a nerve cell to a liver cell, to the cell of a protozoa, or to the cell of a plant, is very remarkable.

In this place it may be noted that the ganglion of the posterior spinal nerve root is a mass of cells, sending fibres to the cord and to various parts of the body; and that apparatus of the cell and its fibres has the functions of nutrition and conductivity; that is, a special cell carries on its nutrition much in the same way as any other cell, and has at the same time the power of conducting impressions. And this view leads us to a clearer conception of the functional powers and relations of the masses of nerve cells found in front of the cord: (1) The spinal cells have *white* roots, or fibres, which are distributed to various parts; some to the sympathetic ganglia; (2) the cells of the ganglia have *gray roots*, or fibres, which are distributed to the spinal cord in part. Hence, there are certain spinal cells and certain ganglionic cells that are intimately consociated in so far as their structure is concerned, and very probably have similar and consociated functions. Two things we surely know: (1) That some of the spinal cells are promoters of motion in the voluntary muscles; (2) that some of the ganglionic cells are promoters of motion in the involuntary muscles. We also surely know that injuries to some of the spinal cells and some of the ganglionic cells disturb the nutrition of some of the cells in certain parts of the body. And the cases above cited show that this is so, and aid us in comprehending the functions of the spinal nerve cells and the sympathetic nerve cells. And the outcome of this view is, that there are certain nerve cells in the spinal cord and certain nerve cells in the sympathetic ganglia that are promoters of the movements of nutrition.

In a given case, if we suppose a motor nerve cell to be paralyzed, the muscle cells to which

its axis cylinder goes will also be paralyzed. And if in a given case it is found that certain cells that are not muscle cells are necrosed or degenerated, it must follow, according to the view we have advanced, that certain nerve cells are irritated, inflamed and destroyed, and these nerve cells are called *trophic*, because they have a special influence on the processes of nutrition.

In this place let me say that two views in regard to *trophic* nerve cells have been brought forward: (1) It is supposed by some that the *trophic* nerve cells exist in the spinal cord, notably in the medulla oblongata, the cilio-spinal axis, and the genito-urinary enlargement. (2) It is supposed by others that the *trophic* nerve cells exist in the sympathetic ganglia. Let me add, that each of these views is correct, to some extent, and that one does not exclude the other, for the truth includes, as it were, both views; that is, the *trophic* nerve cells exist in both the spinal cord and the sympathetic ganglia. And the two sets of cells, *in* and *in front of* the cord, are *co-related* in their structure, and *coördinated* in their trophic functions, as well as the motor nerve cells of the cord and the ganglia are *co-related* in their structure and *coördinated* in their special functions.

It is possible to support this view by a consideration of the *semilunar ganglia*. Which is the most important, the special function of the liver, its simple function of nutrition, or the motor function of the fibres of its blood vessels? Any part of the mechanism of the liver is important no doubt, but why should a considerable part of the semilunar ganglia and the hepatic plexus be set apart for the hepatic blood vessels only? It seems to me that the blood vessels of the liver, as compared with other organs of the body, ought not to need the cells of a very considerable part of the semilunar ganglia, and the extensive hepatic plexus, for the contractile work that they are called upon to perform. But it seems to me rather, that some of the cells of the semilunar ganglia are especially engaged in aiding the liver cells to carry out their special functions. In other words, there are ganglion cells that have special trophic functions. Of course, the influence of other parts of the nervous system on the functions of the liver, are not to be overlooked. In this connection, it may be mentioned that the disturbing influence of diseased renal ganglia on the function of the kidney has recently been pointed out by Da Costa and Longstreth; and the meaning of this disturbance is, that the renal ganglia contain *trophic* nerve cells. But these trophic cells are not in the spinal cord, nor in the pre-vertebral ganglia of the sympathetic; they are in abdominal ganglia differentiated from the pre-vertebral ganglia; and if these nerve cells are *trophic*, as they no doubt are, why should not some of the cells of the pre-vertebral ganglia be also *trophic*?

By the term *trophic*, it is not intended to convey the idea that the visceral ganglion cells are the sole agents in the conduct of nutrition. The meaning of the facts is this: the nerve cells of the visceral ganglia, and the special cells that are acting on, and absorbing, and transmitting into the blood vessels the elements of food, are differentiated and are co-related, and they are coördinated in the work of the primary steps of nutrition. There is, as it were, a kind of cell co-partnership for the attainment of a special object; each co-partner performs his own work, and the entire work could not be performed by the ganglion cell, or by the liver cell. In this sense, a ganglion cell is a *trophic* cell, and a liver cell is also a *trophic* cell. And it would be proper to note, that the renal cells are concerned in part of the work of the last steps of nutrition, and that these cells are coördinated with the cells of the renal ganglia; and if nerve cells are associated in the first steps and the last steps of the processes of nutrition, then the question arises: Are not nerve cells associated with the intermediate steps of the processes of nutrition? that is to say, are not those intimate changes that occur in the general structure of the various cells of the body associated with the nerve cells? My reasoning tends toward this conclusion. In fact, there is a point of evidence that appears to have great weight in determining the question, and that point relates to the cornea.

If we admit that the cornea has no vessels, the capillaries terminating in loops at its circumference, and that it is composed of anastomosing fusiform cells, between which are tubular interstices, and that it is abundantly supplied with nerves, coming probably from the *lenticular ganglion*—we may then, in the most reasonable manner, say, that there is no need of motor nerves to act on the muscular fibres of a blood vessel in the cornea, because there is no such blood vessel. But in all reasonable probability we may say that the nerves which enter the cornea are in some way co-related to corneal fusiform cells. And it is quite a remarkable fact that the blood vessels which surround the cornea, that is, their muscular fibres, are supplied with nerves from the same source as the cornea itself—as we have said—the lenticular ganglion. Now, I think it can be understood, that, as the vascular loops

around the cornea supply the nutrient material in connection with their special nerves, the coördinated nerves going to the fusiform cells of the cornea carry from the cells of the lenticular ganglion an influence having much to do with the functions of the cornea, and therefore, with its nutrition, in other words, the fusiform cells of the cornea have nerves that come from *trophic* nerve cells.

A special function of the cornea is the transmission of light and the nutrition of the corneal cells, and hence their molecular construction must be such as to keep up this special function. But as a matter of fact, some animals that for some generations have been without light are destitute of the special corneal structure, showing that special function, or use, in some way modifies the nutrition, and no doubt also modifies the nerve supply, as we may see by comparing the corneal nerves with other superficial and special nerves. And so in whatever reasonable way we look at the corneal nerves—with their cells—and the fusiform corneal cells, we are drawn to the conclusion that there is a coördination of work in the field of nutrition, between special cells.

The corneal cells were differentiated to let the waves of light pass through them, and some of the cells of the lenticular ganglion were differentiated to aid the corneal cells in keeping up a molecular structure that will not impede the light waves as they pass to the retina. Well, the cornea is a kind of connective tissue, which is, in a general way, part of the connective tissue of the body, and it has been found that nerve fibres go to or near the cells of the connective tissue, and as the connective tissue, as it were, performs *frame work*, its function being mechanical, somewhat different from the function of the cornea, where there is molecular mechanism, and as the cells of the connective tissue have not the special mobility of muscle cells, having no need of special motor nerve fibres, it is very reasonable to suppose that the nerve fibres going to these cells coöperate in the work of nutrition, and that the nerve cells from which these fibres come are *trophic*.

(*To be Continued.*)

TEMPORARY GLYCOSURIA, PRODUCED APPARENTLY BY ENFORCED SEXUAL CONTINENCE.

Paper read before the Medical Society of D. C.,

BY H. C. YARROW, M.D.,
Of Washington, D. C.

I desire to call the attention of the Society to the history of a case which, in my opinion, is interesting and somewhat curious. A short time since I was consulted by a male patient, a little over middle age, who complained of a constant desire to urinate; he had pain in the back part of the head, in the lumbar region, and feared that his kidneys were affected. These symptoms had developed within a few days anterior to his visit to me. I requested and obtained a specimen of morning urine, which was of high specific gravity, and which, upon being tested with Fehling's solution recently prepared, showed undoubted presence of sugar. To corroborate my own examination, a sample of the same urine was submitted to Dr. Mew, the chemist of the Army Medical Museum, whose analysis produced similar results. The patient was put upon ammonia bromide combined with fluid extract of jaborandi, and counter-irritating applications were made to the nuchæ and lumbar regions. This treatment was persisted in for nearly a week, the urine being tested for sugar every day; in eight days it had entirely disappeared, and up to the present time is still absent. To get at the history of the case, the patient was subjected to a rigid examination, and was finally induced to make a clean breast of the whole affair, which seemed to me to account for the symptoms related.

A few months since he contracted a friendship for a lady, which gradually increased to something warmer, and finally certain liberties were permitted and taken; but having been placed upon his honor not to go too far, my patient was kept in a state of constant erythism, without being able to gratify the necessities of his ardent nature. In the fullness of his confidence, he informed me that he had endeavored, upon several occasions, to cool his passion with other women, but was unable to succeed. His condition, as evidenced by the urinary trouble, became at length alarming, and induced him to seek professional assistance. It is my firm belief that the history, as related, will account for the sugar in his urine, for we are told by a number of writers that temporary glycosuria may be produced by a number of causes. For instance, T. Lauder Brunton, in Reynolds' System of Medicine, says that sugar in the urine is produced sometimes by violent and depressing emotions; some cases seem to arise from severe bodily exertion and sexual excesses. Roberts states that violent mental emotions may produce it, and this opinion is shared by Bartholow and others. Per contra, in discussing the case, it should not be forgotten that, according to Lionel Beale, occasionally de-

cided traces of sugar may be detected in the urine of persons who are not suffering from any particular symptom. It may be excreted for days, or even for a few weeks at a time, in small proportions. It occasionally happens that after abstinence from food for some hours, a meal consisting entirely of starchy matters will cause sugar to appear in the urine, and if a healthy person under these circumstances takes a quantity of cane sugar, a temporary diabetic condition will almost certainly be induced. We should also remember that the inhalation of chloroform has produced temporary glycosuria, and injuries to the brain have sometimes a like effect. It is not necessary to repeat here the many experiments which have been made upon animals to prove this fact. I should not omit to state that toward the close of my patient's attack nature relieved the distended seminal vesicles, and the next day no sugar was found in the urine. An examination was this day made (March 24th) of the urine of the patient spoken of, and not a trace of sugar discovered.

I submit this case to the Society, trusting that from the large experience of my professional brethren some additional light may be thrown upon the subject of temporary glycosuria, and if my conclusions are erroneous I may be set aright.

Hospital Reports.

WEST PENNSYLVANIA HOSPITAL, PITTSBURGH, PA.

Reported for the Medical and Surgical Reporter, by T. L. Hazzard, M.D., Resident Physician.

There have been, during the last seven years, nine cases of

Abscess of the Liver

in this hospital. This is such an unusual number for this latitude that a brief history of them may be interesting to the general reader, or prove useful to those interested in statistics:—

Case 1.—John R., aged thirty-six, born in Pennsylvania; married; temperate; admitted April 3d, 1874. Has had frequent attacks of intermittent fever; was confined several months in prison during the Rebellion; history previous to the war good; has not been in good health since.

Symptoms: Headache; diarrhœa; tenderness in right iliac fossa; emaciated; no appetite; temperature 102°; was supposed to have typhoid fever. Condition remained the same until the 9th, when he had a rigor, followed by a rise in temperature, 104°. Began to show signs of peritonitis over the right side, extending from the iliac fossa to the border of the ribs, with the accompanying symptoms. Four days after peritonitis had disappeared, under treatment. Upon the 16th he sat up and seemed to be recovering. Had profuse night sweats, but no pain until the 20th, when the pain grew intense, and vomiting began, and diarrhœa returned. Patient grew weaker every day, until June 7th, when he died. Treatment supportive, with blisters and absorbents.

Autopsy.—Liver completely filled with small abscesses, except in lobus spigelia. Evidences of caseous degeneration and absorption showed some of the abscesses to be of long standing. Bowels showed numerous ulcerations from long standing dysenteric diarrhœa. Other organs normal.

Case 2.—Thomas McK., aged thirty-two; Ireland; puddler. Admitted July 16th, 1874. History not clear; suffering acute pain in right hypochondriac region; liver dullness extended from four inches below the ribs upward to the third rib, and from the median line in front to the same line at back. Had been suffering for three weeks before admission.

July 18th. Suffered great pain; dyspnœa; tumor increasing upward.

July 19th. Died.

Autopsy.—Right lobe of liver was one huge abscess. The pus had perforated the diaphragm, and the right pleural cavity was filled with thick, fetid pus. The lung was compressed and the heart pushed to the left.

From the nature of his vocation, that of iron puddler, the abscess was probably of traumatic origin, as no other cause is assigned.

Case 3.—Charles M., aged thirty-four; Englishman; puddler; man of good habits and good health. Admitted Nov. 19th, 1875. Eleven weeks before began to have pains in region of liver, shooting into his right shoulder. At the same time he had rigors, followed by profuse perspiration. These symptoms occurred at irregular intervals, the pain finally becoming so severe that he sought relief in the Homœopathic hospital. Remained there for eight weeks, when he was admitted to this hospital. Could rest in bed only in sitting posture; breathed with great difficulty; emaciated and slightly jaundiced; abdomen greatly distended; bowels constipated; fullness of right side until the intercostal spaces were obliterated; severe pain over liver; dullness increased. The seat of the most severe pain was under the sternum.

Diagnosis of abscess made and exploring needle introduced. A few drops of blood flowed out, but no pus.

December 13th. Has had a month of comparative ease. Has taken stimulants, with morphia, to relieve pain. To day suffers great pain over liver. Pain extends over abdomen, and general peritonitis sets in.

December 17th. Condition grew steadily worse. Died.

Autopsy.—Peritoneum greatly inflamed. Cavity filled with sero-purulent fluid, and flakes of lymph. Strongly adherent in the median line. A large abscess was found in the upper and posterior part of the right lobe. It was filled with a yellow, thick pus. The right suprarenal capsule was destroyed, and the kidney formed a part of the abscess wall. Other viscera apparently normal.

Case 4.—Richard H., aged 40; born in England; laborer in rolling mill; intemperate. Admitted December 22d, 1875. Has history of bad health, with pain in bowels, diarrhœa and headache. Was treated for inflammation of bowels. Has thin, clay-colored stools; several daily. They are exceedingly offensive, and sometimes contain blood.

January 11th. Had œdema of right leg and thigh, and left leg to the knee. Right abdominal and thoracic parietes as high as nipple. Hepatic dullness increasing upward; is as high as the nipple, and extends downward into the iliac fossa. Urine voided in small quantities, and deposits lithates; contains albumen. Patient lies with head and shoulders elevated, and knees drawn up. Pulse thin and wiry. Extremities cold and clammy. Suffers no pain.

Jan. 20. Had delirium. Temp. 103. Died the next day.

Autopsy.—Abdominal cavity contained four and one-half quarts of sero-purulent fluid. Colon contracted, and filled with dysenteric ulcerations. The liver contained two cavities, the smaller one having evacuated its contents into the colon. There was a deposit of tubercle in the apex of the left lung. The left pleural cavity contained about six ounces of serum. The right pleural cavity contained about eight ounces of fluid, and there were adhesions in both. There were blood clots in the pericardium.

Case 5.—Francisco B., an Italian, aged thirty-five; single; spoke but little English. Had been having pains at irregular intervals, in hepatic region, for three months. Examination showed bulging of the ribs in the left hypochondriac region, and a fullness in the epigastrium, where the most severe pain was. The dullness was normal on the right side, but extended below the ribs for some distance on the left. The impulse of the heart was communicated through the abscess, and could be felt and seen below the ribs on the left side. He had profuse sweats. Continued about the same until December 30th, when he was attacked by severe pain, diarrhœa and vomiting. He gradually grew worse until his death, January 3d. The highest temperature reached was 102°.

Post-mortem showed a large abscess in the left lobe, which had destroyed the entire lobe. Right lobe apparently normal. The heart and left lung were pushed above the third rib by the arching of the diaphragm. All other viscera normal.

Case 6.—Chas. McI., Canadian, aged twenty; teamster; temperate. In May, 1880, was drawing logs from the river, when he fell upon the end of one, striking upon his right side; was obliged to go to bed for a week; resumed work again, but was obliged, by pain in hepatic region, to leave off hard work. Had pain in right shoulder and side. Has never been in a warm climate, never had dysentery, or suppurating wound. Admitted to hospital in November, 1881. At this time there was pain in side and shoulder, cough, abdomen somewhat distended, and liver dullness extending high into right chest cavity. Diagnosis of pneumonia made, but soon changed for abscess of liver. Continued, sometimes better, sometimes worse, until January 2d. At this time the dullness extended from the right nipple well down into the inguinal region, and over as far as the umbilicus. Deep fluctuation detected near the ensiform cartilage. An aspirating needle was introduced by Dr. W. J. Asdall, four inches below the nipple, in the mammary line, drawing off sixty-four ounces of purulent, sanguineous fluid. Patient experienced great relief of all the symptoms. A flexible catheter was introduced and retained in place. The cavity was washed daily with carbolized water, 1 to 40, and the patient given tonics and nourishing diet. Improved rapidly and steadily until April 1st, when he had severe diarrhœa, and his health began to break down rapidly; appetite became poor until, from exhaustion, he died, May 28th.

Post-mortem showed three-fourths of the right lobe occupied by the cavity. The pus had perforated the diaphragm and broken into the pleural cavity, where a sack had been formed by pleuritic adhesions. The right kidney was adherent to liver; lungs and heart normal, except right lung, which was very much contracted by pressure.

Case 7.—James C., born in Louisville, Ky.; aged nineteen; river man. Has lived all of his life in Louisville. Has been further south for months at a time. From time to time he has noticed little swellings over his liver, which would make him a little sick, but, when painted with iodine, disappeared in a few days or a week. Entered the hospital with the usual symptoms, May 28th, 1881. The dullness extended from the third right rib to below the lower border of the last, and on the left was continuous with the spleen dullness.

June 2d. Fluctuation being detected, the tumor was tapped by aspiration, between the seventh and eighth ribs posteriorly, and twenty ounces of sanguineous pus removed. The abscess was not entirely emptied, and a drainage tube introduced allowed of the slow evacuation of pus as it accumulated. A local peritonitis followed, but was easily controlled, and great relief experienced. Five days afterward there were all of the symptoms of collapse. The pulse became feeble; temperature, 95; skin cold and clammy. Active stimulation restored him. In a few days afterward all bad symptoms had disappeared. Decided to make an opening lower down, which was done by free incision with the knife; evacuated about two pints of yellow pus; a curved trocar and canula were introduced, and nearly two quarts more flowed out. Emaciation was rapid from this time, but the relief was great. He was seized with secondary pneumonia, and died June 22d, having been in the hospital not quite one month.

Post-mortem showed the right lobe entirely taken up by a large cavity; there were numerous cicatrices in liver, which had doubtless been small cavities; the other viscera apparently normal.

Case 8.—C. P., aged 47; temperate; born in Pennsylvania; had never been in the south; never had dysentery or suppurating wound. When brought to the hospital was suffering with great pain in hepatic region; slight jaundice. He was so bent over, that it was impossible for him to as-

sume the upright position; liver dullness extensive; dyspnœa. Diagnosed pneumonia; afterward the abscess pointed in the back on the right side. Diagnosis changed to lumbar abscess; then again to abscess of liver; was opened by bistoury, and sanguineous pus to the amount of two pints discharged. Debris of liver tissue found in pus. (Notes are here wanting until three weeks afterward, when patient was discharged cured.)

Case 9.—L. M., aged 46; intemperate; iron puddler. Three weeks before entering hospital he began to feel bad; vomited, and had severe pain in right side; has had vomiting spells once daily, at least, ever since, and has had chronic diarrhœa. Entered hospital June 1. Upon examination, a tumor the size of a cocoanut was seen upon the left side. There was fluctuation. Tumor very painful, as, indeed, was the entire abdomen. Dyspnœa, continuous vomiting and purging.

June 2d. Patient died. The liver was found to contain six cavities, from the size of a cocoanut to the size of a walnut. The large cavity mentioned above had bursted during the night, and pus was in abdominal cavity. The pus in the several cavities was green, or yellow, or reddish yellow. Extensive peritonitis; ulceration of bowels and stomach. Other viscera normal.

The treatment in all of these cases was supportive, and the various symptoms were treated as they would arise. It will be seen that the causes can reasonably be traced to ulceration of bowels in these cases. Traumatic causes in two; living in tropics (?) two; no cause, two. Two only were multiple, the rest being single abscesses.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINIC OF WILLIAM GOODELL, M.D.,

Professor of Clinical Gynecology in the University of Pennsylvania.

Reported by Wm. H. Morrison, M.D.

On Monday, Nov. 14th, 1881, Dr. William Goodell performed

Double Ovariotomy,

at the Hospital of the University of Pennsylvania. The operation was performed in a private room of the hospital, in the presence of one section of the graduating class of the medical department of the University. Previous to the admission of the class, the atmosphere of the room was saturated with a spray of carbolized water, the patient etherized, placed on the operating table, and a piece of rubber cloth, about one yard square, having at its centre an oblong hole eight inches in its longest diameter, was secured to the abdomen by means of lead plaster spread around the circumference of the opening. The object of this was to protect the clothing of the patient from the discharges. This it did perfectly.

Dr. Goodell was assisted by Drs. B. F. Baer, W. L. Taylor and Palmer. Ether was used as an anæsthetic, and the antiseptic method was adopted in all its details, the operator and his assistants carefully washing their hands in carbolized water previous to the operation, and also several times during its performance, the sponges being thoroughly and frequently washed in a carbolized solution, the instruments being kept in a 2.5 per cent. solution of carbolic acid, and a spray of the same strength, from a powerful steam atomizer, being kept directed on the parts during the operation and the dressing of the wound.

The Doctor premised the operation with the following remarks: "Mrs. J. S. C., aged thirty-six years; married; two children, aged respectively, fifteen years and eleven years. The catamenia are regular and free, accompanied by bearing down pains. She came to consult me on October 7th, 1880, on account of various uterine symptoms, and a tumor, which she had discovered only six months previously.

"The womb measured 3.5 inches, and lay to the left, and so high up that the tip of the sound could be felt in the left groin. To the right of the womb and posterior to it was an elastic tumor as large the fœtal head, conveying the sensation of fluid. It seemed very closely adherent to the womb, and every motion communicated to it affected also the womb.

"The diagnosis which I made at that time was cystic degeneration of the right ovary, but the tumor formed so slowly that after a year it had hardly reached the navel, and I was disposed, therefore, to consider it a cyst of the broad ligament. It gave her, however, far more pain and uneasiness than is usually produced by either ovarian or parovarian cysts.

"On Oct. 5th, 1881, I tried to empty the cyst by an aspirator, but succeeded in removing only half a pint of thick, stringy, colloid fluid. The diagnosis was, therefore, narrowed down to colloid multilocular cyst of the right ovary.

"I shall now proceed with the operation, and I hope that no one will speak to me or ask me any questions during the operation, nor shall I talk much, as one needs all his wits about him in performing this operation."

The abdomen having been washed with the carbolized solution, an incision, beginning one inch below the umbilicus and extending downward four inches, was made. The skin, superficial fascia and muscles were carefully cut through. The transversalis fascia then appeared. This was cut on the director, and the peritoneum exposed. All bleeding vessels were now secured by pressure-forceps, having a catch. The peritoneum was hooked up with a tenaculum and divided. The cyst then appeared, the doctor remarking that "whenever you see this blue colored cyst, it is almost invariably a cyst of the ovary. In my operations, when this blue color was present, it has always been a cyst of the ovary. As I have said, my diagnosis is that this is a cyst of the right ovary, but it may be of the left, for I have been caught on that point."

Wells' trocar was then introduced, but only a small quantity of thick, yellowish fluid escaped. By a little manipulation, enough fluid was removed to allow of the opening into the cyst to be drawn through the wound in the abdomen. It was then enlarged and the hand passed into the cyst, breaking up some of the smaller ones. After

this, the tumor was drawn out as far as possible, and each cyst punctured as it appeared. This allowed the tumor to be drawn through the abdominal incision. Two flat sponges were then passed in on each side of the abdomen, to prevent the air and discharge from reaching the peritoneum. The pedicle was then secured temporarily by Dawson's clamp and the tumor removed. A needle, armed with a double thread, was passed through the pedicle, and the pedicle tied in two sections, the Doctor remarking, "for tying this, I use the finest silk thread (carbolized) compatible with strength.

"This case has been a very easy operation. There were very few adhesions. Last Saturday I performed this operation thirty miles on the other side of Pittsburg, and removed a solid tumor of the ovary, which is a very rare form of growth. I am going to return this pedicle to the abdominal cavity. You might ask, 'Will not the distal end slough?' No, it will not. This ligature has cut deeply into the stump. The thread has entirely disappeared, and the parts on each side of the ligature are in contact. Plasma will at once be thrown out, and within twenty-four hours blood vessels will pass from one side to the other. The remains of the pedicle will also contract adhesions to the surrounding parts and in this manner receive nourishment.

"The case that I operated on a week ago to-day, from which we removed both ovaries and two fibroid tumors, is doing very well. I shall now examine the other ovary (the left)." This ovary was also found to be diseased, and was removed, with the fimbriated portion of the Fallopian tube. A sponge was then placed in Douglass' pouch, to see if there was any oozing of blood. The doctor had the sponges carefully counted several times, to make sure that they were all accounted for. "It is very important," he remarked, "to count the sponges, for almost every ovariotomist has left sponges in the abdomen." Two sponges were left in the abdomen while the external stitches were being passed. These consisted of carbolized silk threads, armed with a needle at each end; they were passed from within outward, and included all the tissues. "I include the peritoneum because it unites with great quickness; it will have united in twenty-four hours: so that if there is any pus formed in the upper layers of the wound, it cannot get into the peritoneal cavity." The external stitches having been passed, the sponges left in the cavity were removed, and found to contain no blood. The sponges and the dressing forceps were again counted, and the number having been found to be correct, the external incision was closed.

"Spencer Wells performed an ovariotomy one afternoon (his usual time for operating), and in the evening he had to come again to the hospital, because the nurse, in cleaning the instruments, had found that one pair of forceps was missing. Mr. Wells had to open the wound and fish for the forceps before he found them. You see that we cannot be too careful in counting the instruments and sponges. I know of one instance, where a gentleman, while breaking up adhesions, was on the point of losing a large seal ring, and would have lost it in a moment more, if his attention had not been called to it by a bystander."

A piece of salicylized cotton was then moistened in the spray and placed over the wound, a pad of raw cotton, secured by half a dozen adhesive straps, was used to fill up the hollow in the abdomen, and the dressing was finished with a flannel binder.

"What will her diet consist of? As she has been starved to day we shall not be troubled with vomiting. She will receive nothing to eat for forty-eight hours. If she is thirsty, she will receive a little hot water—sips of very hot water—and if necessary a little ice, but the hot water is preferable to the ice. After that time we shall begin to give her a little milk. Immediately after the operation, an opium suppository will be slipped into the bowel. Enough opium will be given to relieve what pain she may have.

"A word in regard to the spray. Some ovariotomists are giving up the use of the spray, but I am not ready to give it up, especially when I have you gentlemen present, for you have been around the dissecting room and the wards of hospitals. I should not have ventured to have you present, even with the spray, if I had not, when in London this summer, seen the operation performed successfully in the presence of a large number of persons."

The patient was then put to bed and cans of hot water placed along the body.

The time occupied in performing the operation was forty minutes. She recovered promptly and without any bad symptom.

Editorial Department.

Periscope.

Subcutaneous Ligature in Varicocele and Varix.

Mr. John Duncan says, in the *British Medical Journal*:—

The treatment of varicocele always presents a certain difficulty to the surgeon. This disease is not dangerous to life, nor does it seriously interfere with ordinary functions and avocations; but it is a source of harassing if not severe pain, is a matter of solicitude to the patient, and in some cases leads to wasting of the testicle. The former considerations have led some to recommend palliation by suspension, the vein truss, and the cold douche; while the immense number of operative measures which have been devised, and which are not devoid of danger, bear witness to the importance of the latter. In the subcutaneous ligature by catgut we have a means of meeting the difficulty. It is singularly easy of application, free from risk, and very certain in its results. The mode of applying it is as follows: The veins are carefully separated by the fingers

from the artery and vas deferens, and a needle armed with catgut is thrust through at the point of separation; it is again introduced at the orifice of emergence, made to pass between the veins and the skin, and finally brought out at the original entrance. The two ends are then firmly knotted with as much force as strong catgut will bear, and cut short. By traction on the loose skin of the scrotum, the knot is made entirely to disappear, and the punctures are covered with salicylic wool saturated with collodion. The same manœuvre is repeated at a distance of an inch or a little more. I have now performed the little operation six times with complete success. In two cases, three ligatures were applied; but, in the others, to tie the vein at two points has been found sufficient. The effect is the formation of a hard lump of coagulum between the ligatures, at first slightly tender, but which soon becomes perfectly callous. I have just examined a patient on whom I operated more than a year ago. He gives me the most satisfactory assurances of complete relief. A small, hard nodule is still to be felt; the testicle is a little larger than its fellow; and the superficial scrotal veins are somewhat distended. But he feels no inconvenience, and has given up the suspensory bandage which he wore before the operation. The other cases have turned out equally well, and in one of them there has also been a year's probation. In two of them there had been previously some wasting of the testicle; but I hear that this has not as yet progressed further.

The success of the treatment of varicocele by this means induced me to apply it also in varix of the leg. So long as a varicose vein is not a source of inconvenience or danger to the patient, the general opinion seems to be that the use of the elastic stocking is all that is necessary. If that be not effectual as a cure, at least it prevents further deterioration. I should be inclined to say that, even in advanced cases, the stocking ought first to be tried; but when solid œdema and eczema and ulceration cannot thus be kept in check, or perpetually recur, some more radical measure becomes plainly desirable. There are also cases in which a limited portion of a single vein is greatly distended, and in which, although giving rise to little inconvenience at the time, it is, from its high situation, difficult to control by pressure, and likely, therefore, to spread and increase. In such cases, if a radical remedy be simple and safe, it ought to be applied. Some have objected to all operations involving the obliteration of a vein, that there is a likelihood of others becoming varicose; and that the deep-seated varicosity thus induced is apt to be painful. But I am sure that must be rare. Undoubtedly the same causes which were originally at work may be allowed to continue their action in other veins, through want of care; but it is not consistent with experience that, when one vein or set of veins is obliterated others become varicose. On the contrary, veins on which backward pressure is thrown tend to varicosity; but parallel channels only enlarge and dilate. There is a long step between varicosity and simple dilatation. Large portions, for example, of the femoral vein often become obstructed in fever and other blood diseases. The leg may afterward remain permanently enlarged; but the veins are little more prone to varicosity than in the sound limb. But even if such were the case, a problematical future evil would not justify abstention from what otherwise is beneficial; and the improvement that follows obliteration of a varicose vein is rapid and distinct.

The operation is performed precisely as for varicocele. The needle is passed first under the vein, and then between the vein and the skin, entering and emerging by the same punctures. It is not so easy to draw the skin over the knot after ligating as in varicocele; and this will be facilitated by slightly enlarging the puncture by means of a tenotomy knife. When, as is sometimes the case, the limb is swollen and brawny, and the veins run, as it were, in gutters cut out of the solid œdema, the difficulty of operating is considerably increased. In such cases I have, as a preliminary, kept the patient at rest, and applied the India-rubber bandage for a few days. It is always of advantage, during the operation, to have the limb gently constricted by a bandage above the point of ligature, in order that the veins may be distended with blood, which afterwards coagulates.

The Treatment of Hay Asthma.

The following summary of treatment is given by Dr. J. C. Thorowgood, in the *Lancet*, July 16th:—

Anti-congestive Remedies.—Of these one of the best is ammonia, used in the form of ordinary Preston salts (a mixture of the neutral carbonate of ammonia with oils of cloves and lavender), or as ammoniacal vapor, inhaled for a few minutes from a mixture of twenty drops of the liquor ammoniæ (B. P.) in a pint of water at 80° F. Ten drops of spirit of camphor and three to five of eucalyptus oil may often be advantageously added to this inhalation. The ammoniacal vapor slowly inhaled by the mouth and exhaled through the nostrils acts as a stimulant and promotes the mucous flux, by means of which the congested vessels are already commencing to relieve themselves. The action of the ammonia permanently tends to diminish hyperæmia of the mucous membrane, and in this respect ammonia differs markedly from other stimulating inhalations, which give only temporary relief. Properly managed inhalation of chloride of ammonium is useful in cases where hyperæmia of mucous surfaces is very marked and chronic.

With a view to destroying the pollen granules in the nasal passages, drawing up into the nostrils, or inhaling as spray, a solution of sulphate of quinine is decidedly useful. Ten grains of the sulphate may be dissolved in one pint of distilled water and this solution snuffed up into the nostrils—a method preferable to the employment of the solution by the nasal douche, for more than one reason.

Last summer I tried, for the relief of the throat irritation of summer catarrh, lozenges containing one grain of salicylate of quinine in each lozenge. The salicylate is supposed to act as a germicide, and destroy the vitality of any inhaled pollen germs. Carbolic acid vapor is very useful.

Iodine vapor I have also tried as an inhalation, but never saw any benefit come of its employment. A liniment of equal parts of chloroform, simple camphor liniment, and eucalyptus oil rubbed well round the throat relieves irritation; the smell, too, of the antiseptic eucalyptus oil is, at the same time, not without good effect. When the congestion and catarrh have extended downward to the air-tubes, so as to cause bronchial spasm and regular attacks of hay asthma, then few remedies appear to surpass arsenic, and this may be employed by vapor or by the mouth. As a remedy for asthma arsenious acid has long been used by the Chinese.

I have had opportunity of trying nitrated paper cigarettes, after the formula given by Trousseau, so that each cigarette contains three-quarters of a grain of the arseniate of soda, and find them very satisfactory. The patient should inspire deeply three or four times from the cigarette, then wait awhile, and see how he feels. I may say that I have never known any unpleasant effect to be caused by the careful administration, in any form, of arsenical remedies.

The headache and distressing after feelings that so often follow the use of fuming inhalations of stramonium, belladonna, or opium cigarettes and powders, usually make persons averse to their employment, unless the asthma comes on with great force. Tobacco smoking, however, is a general and approved source of relief.

Internal Remedies.—Space permits me to mention but a few of these, and among them I would give the first place to the preparations of arsenious acid. The acid may be given in a granule or pill, in commencing dose of one-fiftieth of a grain three times daily, one hour after food. Over both the catarrh and the bronchial spasm its effect will be found marked and decided, while gastric irritation and tendency to sickness often are much relieved, making one think the remedy may have some special action over the pneumogastric nerve.

The solution of arseniate of soda, in dose of two to five drops in water, may agree better than the arsenious acid in some cases; but if neither succeeds, then it is well worth while to try the following combination: Fowler's solution, two minims; potass. iodid., two grains; liquor ammoniæ, five minims; water, one ounce; three times a day. It will succeed where arsenic and iodide of potassium separately fail to benefit. Troublesome œdema about the face and eyes, remaining after the more severe symptoms of asthma are gone, I have found to give way speedily to tincture of cantharides, in doses of five minims with twenty of spirit of nitrous ether, in water, three times daily. A remedy, strongly recommended by Dr. Gream in 1850, is tincture of nux vomica; and there is no question as to its value in old standing asthma with flatulent dyspepsia and irregular, weak action of the heart. In these cases it goes well, in doses of five to ten minims, with dilute phosphoric acid and tincture of ginger. When Gream employed it in summer catarrh he also used acetate of lead ointment, applied high up the nostrils, a remedy which, like snuff of bismuth subnitrate, would undoubtedly do much to relieve local irritation and congestion.

Another remedy, somewhat similar in action to nux vomica, inasmuch as it agrees remarkably well in cases of asthma with feeble cardiac power, is the citrate of caffeine. Two or three grains of the citrate dissolved in water or in warm coffee are by no means an unpleasant dose, and in such cases as those just indicated, it is unquestionably of considerable value. Where the citrate of caffeine fails to give decided relief to the asthma, it nevertheless, as patients have informed me, greatly mitigates the exhaustion and depression that had been previously experienced after the severity of the attack had passed away.

Sayre's Bandage in the Treatment of Fractures of the Vertebræ.

At the last meeting of the Association of German Surgeons (London *Medical Record*), Dr. Küster (Berlin) said the efficacy of Sayre's plaster-of-Paris bandage in cyphosis had suggested its use in fractures of the vertebræ. He had used the plaster jacket in four such cases. In two cases of fracture of a lumbar vertebra, with symptoms of paralysis of the bladder, rectum, and lower limbs, it had been applied with good result; while no improvement followed in a case of fracture of the third dorsal vertebra. In a case of fracture of the middle part of the dorsal spine, with the formation of an angular projection, and complete paralysis of both arms and legs, and also of the bladder and rectum, Dr. Küster had broken up the callus under narcosis, and applied extension (up to twenty pounds); the result being a complete disappearance of the paralysis. Dr. von Langenbeck had applied the plaster-of-Paris bandage in a recent fracture of the dorsal spine in 1862; it was, however, not well borne, and up to the present day he had obtained better results by placing the patient on a water-bed and applying extension by weights. Dr. Bardeleben (Berlin) was not an opponent in general of Dr. Küster's plan of treatment; but he would recommend that the plaster bandage should not be applied immediately in cases of fracture of the spine, as such fractures were always complicated with other injuries; and it might happen that symptoms of paralysis, which were even strongly marked on the first day, might disappear in a short time without any treatment. Dr. Sonnenburg (Berlin) had attempted, in the Berlin Clinic, to apply the plaster-of-Paris jacket, without narcosis, in the case of a child suffering from disease of the cervico-dorsal region of the spine. During suspension, difficulty of breathing suddenly set in; and the child died in an hour and a half, in spite of tracheotomy and artificial respiration. At the necropsy, along with disease of the lower cervical and first dorsal vertebræ, there was found to be a large abscess extending into the posterior mediastinum; it had not burst. Probably this abscess had caused death by pressing, during the suspension, on the trachea, and on the pneumogastric and phrenic nerves. The spinal cord showed no change. Dr. Basch (Bonn) had become very cautious in the use of suspension in spondylitis. Forcible extension led to the formation of abscesses. He had had under his care a case of fracture of the

spine with disturbance of motion and sensation, in which recovery took place under suspension and the plaster-of-Paris bandage. Dr. König (Göttingen) said that the plaster bandage would probably only come into use in slight cases of fractured spine. In severe cases it would be dangerous to suspend to any important extent. Dr. von Langenbeck treated Pott's disease with the plaster jacket only in cases where the children could be examined daily, and the danger of bed sores be thus averted. Chloroform was to be recommended in the application of the bandage, as it prevented violent movements on the part of the children, and thus obviated accidents. The plaster jacket was not suitable for the treatment of scoliosis. For this he used only Taylor's bandage. Dr. Wagner (Königshütte) advised caution in the application of the gypsum jacket in recent cases of fractured spine, lest the blood extravasated into the spinal canal should undergo compression. In one case he had seen paralysis appear on the application of the bandage, which was, therefore, immediately removed. In four subsequent cases he had allowed fourteen days to elapse before applying the plaster bandage, and recovery had taken place in another four weeks. Dr. Busch (Bonn) recommended the plaster jacket in the treatment of scoliosis. Bed sores could be prevented by a pad of cotton wadding on each side of the projection.

The Electrical Treatment of Dysmenorrhœa.

Dr. J. D. Mann writes, in the *Lancet*, July 23d:—

The now old-fashioned term "neuralgic dysmenorrhœa" still expresses all that is known of the causation of many cases of this disorder. All that can be diagnosed in an otherwise healthy uterus is an irritable condition of the mucous membrane of the cavity, which, under certain circumstances, evokes painful, clonic contractions of the organ. In such cases, when the sound reaches the uterine cavity, the patient experiences pain identical with that of dysmenorrhœa, the contact of the instrument with the neurotic membrane being sufficient to set up irregular uterine action. In this form of the disease much relief is afforded by electricity, the result probably of altered nutrition, and of the direct action of the current on the terminal nerves. Associated more or less with dysmenorrhœa is ovarian irritation or neuralgia. When not dependent upon uterine disease this disorder may be successfully treated by electricity, on the principles already laid down. It is often sufficient to administer a current of eighty-five or ninety dix-millivebers, by means of external electrodes, the anode being placed over the affected ovary or ovaries, and the cathode over the lumbar spine. If the accompanying dysmenorrhœa is urgent, it is preferable to introduce the anode into the uterus, and apply the cathode over the ovarian region. If there is suspicion of ovaritis, electricity is not admissible; but tenderness, with slight enlargement of the organ (recognizable on bi-manual examination), with absence of systemic disturbance, is probably due to passive hyperæmia, and is often greatly relieved by the constant current. The relief afforded in simple ovarian irritation is frequently very striking, a soothing effect being experienced by the patient almost as soon as the circuit is closed. In many cases the result of the treatment will be rendered more permanent by the administration of the following nervine tonic: Valerianate of zinc, valerianate of quinine, valerianate of iron, of each one grain, made into pill; one to be taken twice a day. The pills should be protected by an impervious coating, as the combinations of valerianic acid have an exceedingly disagreeable odor.

Some forms of sub-involution of the uterus are amenable to the action of electricity. Retarded involution cannot be regarded as a disease *per se*, but rather as the result of one or more morbid conditions. Retention of fragments of placenta or membranes, inflammation of the cervix from laceration or bruising during labor, and partial prolapse, are among the most common causes. It is obvious that sub-involution thus produced can only be cured by the removal of the exciting cause, and this is to be accomplished by means other than electricity. Simple sub-involution dependent upon muscular atony, or upon malnutrition, alone comes within the range of electro-therapeutics. For the treatment to be successful it is essential that the disease should be attacked in the early stage. It is well known that prolonged hyperæmia produces hyperplasia of the areolar tissue in the organ or part affected. When once this stage of sclerosis is reached in the uterus, and an excess of fibrous tissue obtains over the muscular elements, absorption becomes a matter of grave difficulty, if not an impossibility. In dealing with a hypertrophied uterus composed of a mass of muscular fibres infiltrated with fluid, and but sparingly so with cellular growth, any method of treatment which will stimulate the nutrition of the organ and accelerate the absorption of the morbid products tends to promote a cure. Such a stimulant is electricity. Unless contra-indicated an insulated sound forming the cathode is introduced into the uterus, the anode is placed over the lumbar spine, and a current of about ninety dix-millivebers is passed for ten or twelve minutes, every alternate or third day. During the first half of each application the current should be stabile; during the latter half it may be interrupted at intervals, in order to stimulate the contractile properties of the womb. While the interruptions are being made it is desirable to reduce the current strength, as the opening and the closing of the circuit are attended by slight shocks, which are very disagreeable, if too strong. The patient should maintain the horizontal posture for some hours after each application. If the uterine wall is so soft as to render the passage of a sound dangerous, a cervical electrode may be used in place of the sound. In a case of sub-involution which I recently treated with electricity, each application was followed by a temporary discharge, and slight pain, of the after-pain type; the uterus was reduced to its normal condition in seven weeks. I need hardly observe that perimetric inflammation, or any latent pelvic disease, is contra-indicant of the internal use of electricity.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——"Aids to Rational Therapeutics," by J. Milner Fothergill, M.D., M.R.C.P. of London, published by G. P. Putnam's Sons, New York, is a paper-covered book of one hundred and twenty-five pages, well worth the small price asked for it, twenty-five cents. It teaches the student and practitioner how rationally to prescribe, a point too much neglected in medical education.

——From the Government printing office at Washington, we have received the "Annual Report of the Supervising Surgeon-General of the Marine Hospital Service of the United States," for the year 1881. This pamphlet, of more than two hundred and forty pages, besides containing very much valuable and interesting information, has an article by E. Hebersmith, M.D., Surgeon U. S. Marine Hospital Service, on Beri-beri, which is well worthy of perusal. It seems from this report, that Beri-beri is a disease produced by some specific atmospheric poison (nature unknown), whose development is fostered and hastened by bad hygienic surroundings.

BOOK NOTICES.

A Pocket-Book of Physical Diagnosis, for the Student and Physician. By Dr. Edward T. Bruen, Demonstrator of Clinical Medicine and Lecturer on Pathology of the Urine in the University of Pennsylvania; Lecturer on Pathology in the Woman's Medical College of Philadelphia, etc., etc. With wood engravings. Philadelphia: Presley Blakiston, 1012 Walnut street. 1881. Cloth, small 8vo, pp. 256. Price $2.00.

The author of the work before us has for several years been engaged in teaching diagnosis to private classes, and it is the substance of the instruction thus given that he has here arranged in book form. The methods of diagnosis are minutely described, and the alterations in the percussion note, in the respiratory murmur and the heart sound, consequent upon structural changes or functional disturbances, are lucidly explained. The whole subject has been treated with thoroughness and care, and the work is one which we can conscientiously recommend to students and practitioners as a reliable guide to the acquisition of skill in physical diagnosis, which justly is regarded as one of the most brilliant accomplishments in the domain of medicine.

Manual of Organic Materia Medica. By John M. Maisch, PHAR. D., Professor of Materia Medica and Botany in the Philadelphia College of Pharmacy.

This publication is evidently designed more particulary for the use of students of pharmacy and druggists, than physicians. The classification adopted is based upon the similarity in the physical and structural properties of drugs, and to those who are not so much interested in their action upon the animal economy, this is a well chosen arrangement. By this selection drugs from the same part of the plant are brought together, and in consequence there are chapters (in Part Second) devoted to roots, rhizomes, flowers, fruits, etc. Part First treats of animal drugs. Part Third of drugs without cellular structure, embracing sugars, gum resins, volatile and fixed oils, etc.

The numerous illustrations, many of which we recognize as identical with those of the National Dispensatory, make the book appear simple, easy, and even attractive, but upon close examination one is disappointed. The book is less interesting than the Organic Materia Medica, published about two years ago; that we thought dry and heavy.

The bare citation of facts, devoid of interesting detail, becomes monotonous and tiresome, and information is less readily inculcated. This being the primary object of such works for students, we consider it, in this respect, quite deficient. The illustrations of microscopic structure are quite an addition to this text-book, but some important sections are not shown, as might be expected, *e. g.*, Podophyllum.

The cuts showing transverse sections of the various roots of sarsaparilla do not show them as they appear under the microscope. They, like many of the cuts, seem to be diagrams—good as far as they go, but are imperfect representations of microscopic transverse sections. Gelsemium is one among a number not sufficiently magnified to illustrate the true cellular structure. Taken as a whole, they are representations which will be of good service to the student of histology in pharmacy.

The metric system introduced in the book is a feature worthy of mention. One thing the book is prominently deficient in is, the omission of the names of the officinal preparations into which the various products of materia medica enter. This point is one in which the student and apothecary should be as well drilled as in the origin, structure, or medicinal properties, and in a work of this kind such an addition would be quite valuable.

Transactions of the New Hampshire Medical Society, at its Ninety-first Annual Session, held at Concord, N. H., June, 1881. pp. 168.

The subject chosen by the president, Dr. G. P. Conn, for his address, was State Medicine. He spoke of the progress already made in State or preventive medicine; how the people are becoming every year more and more interested in matters pertaining to the prevention of disease; how twenty-one States have already established boards of health, and also of the influence of the National Board of Health, and closed his address by an eloquent appeal to every intelligent, public spirited man to join in advancing the interests of public health, by the enactment of laws for the advancement of preventive medicine. Dr. A. H. Crosby read the report on surgery. For this report a paper was furnished by Dr. F. A. Stilling, giving cases of malignant disease, with a report on the use of the Dermal Curette; and Dr. John R. Ham furnished a contribution to the Study of Fractures and Dislocations. Dr. J. W. Parsons read a paper on Puerperal Convulsions; Dr. J. R. Kimball, on Conservatism in the Practice of Medicine; and Dr. D. W. Jones, on Nihilism in Medicine. Several other papers and reports were also read.

Lectures on the Pathological Anatomy of the Nervous System, Diseases of the Spinal Cord. By J. M. Charcot, Professor to the Faculty of Medicine of Paris, Physician to La Salpetrière, etc., etc. Translated from the reports by Dr. E. Brissaud, in the *Progrès Médicale*, by Cornelius G. Comegys, M.D., Lecturer on Clinical Medicine in the Cincinnati Hospital, etc., etc. With illustrations. Cincinnati: Peter G. Thomson, 1881. Cloth, 8vo, pp. 165. Price $1.75.

These lectures, seventeen in number, formed Prof. Charcot's course for 1879–'80, and were reported in the *Progrès Médicale*, by Dr. E. Brissaud. Dr. Comegys' translations first appeared in the Cincinnati *Lancet and Clinic*, beginning in September, 1880, and have now, by request, been republished in book form. As a contribution to scientific medicine they are undoubtedly among the most valuable of recent productions. While they, therefore, will be read with interest by the speculative and philosophical theorist, and while the facts here taught will ultimately lead to valuable practical results, the busy physician will find little to attract him or to turn to practical use. The translation has been well performed, and the book is gotten up in good style.

A Handbook of Uterine Therapeutics and of Diseases of Women. By Edward John Tilt, M.D., Past President of the Obstetrical Society of London; Knight of the Crown of Italy, etc., etc. Fourth Edition. New York: William Wood & Company, 27 Great Jones Street. 1881. Cloth, 8vo, pp. 328.

This constitutes the volume for November, of Wood's Library of Standard Medical Authors. After a brief introduction, in which the study and practice of gynecology are discussed in a general way, the author proceeds to describe the modes of examination and surgical instruments. After which comes a chapter on uterine surgery. Dietetics and home treatment also receive full attention, the remainder of the work being devoted to uterine medication proper and the medicinal agents used in gynecological practice, the treatment of displacements, complications and sterility, with a final chapter on the prevention of diseases of women. The book is one that will be found useful.

Nervous Diseases: Their Description and Treatment. A Manual for Students and Practitioners of Medicine. By Allan McLane Hamilton, M.D., Fellow of the New York Academy of Medicine, etc., etc. Second Edition, revised and enlarged; with seventy-two illustrations. Philadelphia: Henry C. Lea's Son & Co. 1881. Cloth, 8vo, pp. 598.

In bringing out a second edition of his work on Nervous Diseases, the author has availed himself of the opportunity to thoroughly revise the text of the former, and to make such additions as recent advances in neurological medicine would call for, thus enlarging the volume by nearly one hundred pages. Many new illustrations have also been added. This work is well adapted to the wants of the general practitioner, for whom it seems to have been especially written. It is a thoroughly practical book, the careful study of which will render the diagnosis of nervous affections the more easy, and their treatment more successful. Several important cases are recorded, giving the additional value of clinical tests to the teachings set forth. Morbid anatomy and pathology receive full attention, and the results of numerous post-mortem examinations are given.

Being carefully and thoroughly indexed, in plain, large type, containing also a table of contents, as well as a list of illustrations, this book is rendered very useful as a reference work for the busy practitioner, to whom we can commend it.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	**$5.00**
Half-Yearly Compendium of Med. Science,	**2.50**
Reporter and Compendium, - - -	**7.00**
Physician's Daily Pocket Record, - -	**1.50**
Reporter and Pocket Record, - - -	**6.25**
Reporter, Comp. and Pocket Record, - -	**8.25**

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,

115 South Seventh Street,

PHILADELPHIA, PA.

WHY NOT CONSULT WITH HOMŒOPATHS?

We do not like to recur often to the relations of homœopathic practitioners to the regular profession. So far as homœopathy itself is concerned, it is now no longer Hahnemannism. Not a single precept of its founder is now respected in full by his followers. Its value as a dogmatic school is, by its own confessions, long since past.

Does that bring it nearer the position it should assume? Is that a reason why its advocates should be recognized by the regular profession?

We say, emphatically, *No*. Homœopathy is now not even true to itself. It is sailing under false colors. It is pretending to the public to be what it is not. It is deluding those who trust to it.

There is no reason why many modern homœopaths should not unite with the scientific part of the profession. Yes, there is one reason, and only one, and this is no credit to them. It is that by unfolding the homœopathic banner they may capture more patients. This, and only this, is the reason that restrains these practitioners from joining us.

It is an all-sufficient reason for the profession to refuse to consult with them. No matter whether therapeutics are alike or not; no matter whether the consultation is intended to be for diagnosis alone; yet it is deteriorating to a man to countenance deception in another; it is compounding a social felony.

Hence we have no hesitation in condemning the recent action of the British Medical Association, which declined to expel a member who had openly turned homœopath. It was said, in defence of their inaction, that to expel him would have advertised him, and enlisted for him the sympathy of the public. Such reasoning is futile. The thing which is right should be done, and let the consequences take care of themselves.

No more do we approve the recommendation of that Association's lecturers, which we recently quoted, to consult with homœopaths, when asked. Such a recommendation is inconsistent with our duty toward our patients, and contrary to the dictates of scientific reasoning. We have shown this repeatedly, and it is not for any such purpose, it is not for the benefit of the patient, that this relaxation of ethics is suggested.

We know the secret motive at its base, and without mincing matters, we shall expose it.

The prominent physicians and surgeons in great cities find their most profitable business in consultation practice, and as a great many wealthy families have homœopathic attendants, consultations in such cases are impossible, if the code is strictly observed. This cuts down incomes very decidedly, and how to get around the difficulty is a frequent matter of thought.

Some are bold enough to go when they are asked, without knowing or caring of what school, color or sex the attending physician is, and spurning the terrors of "the Code" with contempt. Most, however, shuffle and palter, to frame excuses and pay a seeming deference to ethics. A few refuse squarely to meet any but graduates of regular schools.

These are facts, and knowing them, we are not

surprised at the effort of a few London physicians to break down the barriers; nor are we astonished to find that effort seconded in New York city. In one of the late issues of the *Medical Record* is an editorial, clearly aimed at supporting this step, and at introducing it into that city. The motive is unquestionably the same, and it should be exposed. It is not humanity, the welfare of the patient, nor at all the dignity and morals of the profession, which are considered by the advocates of this action, but the pockets of physicians who have a large consulting practice.

Such being the case, no good can be expected from the movement. We consider it one in a false direction, prompted by selfish and unworthy motives, hypocritical, in that it pretends to a higher origin, and unfair to the mass of the profession. Let us retain our principles free from the stain of such imputations. Let us insist that those practitioners who no longer practice homœopathy shall also be honest enough to drop the name of it before we receive them in fellowship.

BIDDING FOR PRACTICE.

A correspondent from a western State asks us, "Is it in good taste, and no infringement of the code of medical ethics, for a medical society in whole, or its members individually, or any medical man, to bid, by sealed proposals or otherwise, for the pauper practice of a county or township?"

This question involves a good many side issues. It is generally held by the most respectable members of the profession, that a physician sacrifices some of the dignity and respectability of his profession as soon as he commences, in any way, to solicit practice. It is the rule, in our profession, that practice must seek the man and not the man the practice. While this custom may seem to some to constitute a hardship, yet in reality it is a most excellent condition, for by and through it is brought into play that most beautiful law of the survival of the fittest. When practice comes to a capable man, as it always will sooner or later, he properly performs the duty which has fallen to him, and from this proper performance of duty receives his advertisement. While the incapable and deficient medical man, though he may for a time *seem* to prosper, eventually fizzles out, as it were, and finds his level.

An exception to this rule, however, would seem to hold in the cases of the specialists of our large cities, who derive their extensive practice and large incomes principally from a judicious course of personal advertising. Note the successful oculist, or aurist, who, in dress suit and white kids, visits the opera. During the intermission between acts, he stands up in the most prominent part of the house, and through an immense pair of opera glasses, eyes the whole audience for some fifteen or twenty minutes. Naturally enough, every one who knows him not at once asks some neighbor who he is; they look and stare at him, and wonder who he is, just as they would look and stare and wonder who any other conspicuous figure might be. Some well-informed member of society announces that it is Dr. So-and-So, the famous oculist, or aurist. The next morning, or within a few days, this person has an eye-ache, or an earache; off he rushes to Dr. So-and-So, who receives him in gorgeously furnished offices, talks to him for ten minutes, prescribes some simple eye wash (well known, in the majority of instances, and frequently used by every well informed practitioner), charges him ten dollars and tells him to call again. Six or seven such consultations constitute his day's work. Then a handsome carriage and spirited horses, with coachman in livery, appear at the front door, and our specialist goes out for an airing, and to still further advertise himself by his fashionable turnout. Home to an epicurean dinner, after which the opera again, the theatre, or a dinner party.

Such is the routine of our present fashionable *specialist*, and by such advertising he makes plenty of money. In the abstract this is wrong, but since it is sanctioned by society, and encouraged by the liberal fees of the fashionable and

wealthy, it will do no good to condemn it. Since these specialists are usually powers in society, and (to their credit be it said) liberal to the cause of medical progress, therefore, their course is tacitly recognized by the medical profession, since it is not openly condemned. But to answer our correspondent, we would say that the code of ethics would not sanction or approve the act of a physician who would endeavor to procure practice in the manner he mentions, and would hint to him to suggest to the county commissioners the fact that, in all probability, the lowest bidder would be the poorest physician, since in medicine, differently from in trade, the man who possesses the greatest stock of knowledge and experience usually wants the highest price for it.

Notes and Comments.

Premature Menstruation.

Dr. Prochownick, of Hamburg, stated that a district physician had called his attention to a child three years of age, highly scrofulous, who, since one year old, was subject to regular catamenial discharges, lasting from two to three days, every four weeks.

This child died of miliary tuberculosis two days after such a flow, and an autopsy was made twenty hours later. The uterus was not large, but its mucous membrane had every appearance of being *post menses*. Its size, thickness, dimensions, and the proportions between the neck and body, far exceeded those usual in the uterus of a child of that age.

It is interesting, therefore, to observe that this menstruation was incidental to a regular evolution of the ovules.

This case is important, because it shows the primitive relation which must exist between menstruation and ovulation.

Engine Drivers' Deafness.

In the London *Lancet* of December 24th, 1881, Moos makes some interesting remarks on this subject. According to his observations, the drivers and stokers of railway engines suffer, sooner or later, from diminished acuteness of hearing, due to their occupation. Usually bi-lateral, this defect becomes manifest sooner in the men employed on railways in which there are many tunnels, than in those who drive engines in level country. Swaback and Pollnow have arrived at the conclusion that this class of employees almost invariably suffer, in the course of time, from diminished acuteness of hearing; of 160 examined, 20 per cent. were found to be more or less deaf. In most cases a distinctly morbid condition of the membrana tympani was observed, which indicated a sclerotic form of chronic catarrh of the middle ear. It was considered by these observers, that this diminished acuteness of the sense of hearing was not dangerous. We must agree with the editor of the *Lancet*, that the engineer of a locomotive has so much responsibility resting on his organs of special sense, that it is imperative that all of his senses should be perfect, and their acuteness entirely unimpaired. This is a question open to practical demonstration, and it would be well for railway officials to turn their attention in this direction.

Circumcision as a Sanitary Precaution.

Dr. Edward T. Williams, in a paper read before the Norfolk District Medical Society, November 29th, 1881, and published in the Boston *Medical and Surgical Journal*, thus discourses on the sanitary value of circumcision: "It probably does good in several ways.

"1st. The exposure of the glans penis to the air and to friction from the clothes dries and hardens its surface, and renders it less liable to abrasion in sexual intercourse, and consequently to venereal ulcers.

"2d. The removal of the foreskin is acknowledged to be useful as a preventive of masturbation. It not only renders the act itself more difficult, but by diminishing the sensibility of the part and favoring the removal of irritating secretions, diminishes also the propensity to the act.

"3d. It prevents the accidents of phymosis and paraphymosis.

"4th. It prevents the retention of the sebaceous secretion and the ensuing balanitis.

"5th. It probably promotes continence by diminishing the pruriency of the sexual appetite."

Fashion vs. Health.

From a secular newspaper, we notice that a woman of good form is only spoiled by the corset. The curves of the body are all outward curves, one arising out of the other. But the chief curves of the corset are inward curves, which are not only incorrect, but are the source of great damage, in compressing unnaturally the organs of the body. Another objection to the corset is in the bones, whose rigidity obscures that rippling movement

of the body which is one of its chief beauties. As far as this is concerned, the body might as well be incased in cast iron. Another objection is in the hard cross line of the bust, which distinctly shows, as do often the laces, under a tight-fitting dress.

With pleasure we read every effort on the part of the secular press to urge the public to place health before fashion, and trust that this very important suggestion will be made public everywhere, and that physicians will use their very best efforts to induce their patients to be guided by it.

Poisoning by Aconite.

The coroner's hearing in the case of Dr. Lamson, the son of the American clergyman at Florence, who is accused of having poisoned his brother in-law at Wimbledon, with aconite, is still in progress. Some very elaborate experiments are being conducted by Drs. Stephenson and Dupré. A case of poisoning similar to this had not taken place for a long period, the time being given by some persons at over 100 years. It is natural, therefore, that the symptoms presented should be new, and in order to form an accurate judgment of them, it is intended to experiment with aconite upon the bodies of animals.

A later despatch from London, says the coroner's jury in the case of the young student, Percy M. John, who died at the Blenheim House School from the effects of poison, as ascertained by medical investigation, has found a verdict of willful murder against Dr. George H. Lamson, brother-in-law of the deceased. Dr. Lamson is the son of the American chaplain at Florence, Italy. It was brought out in the course of the present case, that the deceased student was entitled to the sum of £3500, which, on his death, reverted to his sister, the wife of the prisoner. Just previous to Percy's death, the prisoner was in want of money and had pledged his watch and surgical instruments. He pretended to go and see the young student, and said that the youth was very sick and could not live long. He administered some medicine to him which, it was ascertained, was aconite in the form of a capsule. This caused Percy's death. The day the young man died, Dr. Lamson left for Paris.

Health of New York.

In glancing over the vital statistics of New York, for 1881, several interesting points are noted. We all remember how filthy the streets of that city were last winter and early spring, and now we see that the death rate last year was 31.07 per 1000, while in 1880 it was only 26.47 per 1000, and only 24.50 per 1000 in 1877. Smallpox carried off 450 persons, as against only 81 in 1880 and 2 in 1878. Diphtheria was fatal to 2237 persons. Children were born in five instances to mothers who were under fifteen years of age, and in three cases to women over fifty. One mother was but 13 years and 10 months. 472 of the fathers were over fifty, while 58 were under twenty years. 17 persons over one hundred years old died, one of them, an Irish woman being 110, one 106, and three 104. Eleven of these centenarians were women, and six men.

True Cause of Malaria.

The *Public Ledger* says: It has been remarked that in very many cases in the upper part of New York City where cellars are being excavated and much old soil is being upturned, the inhabitants of the neighborhood suffer from malaria. We can readily believe this to be true, since the element necessary for the production of malaria (organic material) is, by cellar excavation, brought into a condition in which it is capable of producing malarial poison. In other words, organic matter is exposed to heat and moisture, and decomposition results. This practical demonstration in New York, is an additional argument in favor of the theory that organic decomposition is, in all cases, the cause of malaria, which really means nothing more than bad air, rendered bad by the admixture with it of the results of organic decomposition.

Cigarettes.

"'Cigar smoke puffed in a man's face by another man is assault and battery,' says a New York Judge. If that is the case, cigarette smoke puffed anywhere in one's neighborhood should be considered murder in the first degree."

This is a true condemnation of cigarette smoking. It is a fact, not disputed, that the majority of cigarettes are not only made of the most inferior tobacco, cigar stumps from syphilitic mouths and filthy gutters, but that both paper and tobacco do contain much poisonous drug adulteration.

Quadruple Amputation.

In the New York *Medical Journal*, Dr. W. S. Tremaine, Assistant Surgeon United States Army, reports the case of a soldier who was brought into the hospital at Fort Dodge, with both hands and feet completely frozen. Amputation of both hands and feet was performed, and the patient recovered.

Sudden Death During Forced Depression of the Tongue.

A woman sixty years old, suffering from tinnitus aurium and partial deafness, applied to Dr. Moure, who ascertained the existence of catarrh and obstruction of both Eustachian tubes. Wishing to examine the pharynx, he directed the patient to open her mouth; the tongue being in the way, he introduced a depressor. No sooner had he depressed the tongue than the patient drew a hissing inspiration, and commenced suffocating. Believing he had to deal with a spasm of the glottis, the Doctor had recourse to artificial respiration, but asphyxia increased, râles set in. Tracheotomy was then practiced, but asphyxia continued, spumous blood was discharged through the cannula and by the mouth, and the patient expired.

The Doctor believed that the spasm of the glottis occasioned by a forced depression of the tongue would not of itself have been sufficient to cause death in a strong and healthy person, but in the present instance, the patient being under some emotion, an old cardiac affection had probably been awakened, and a rapidly fatal congestion, or apoplexy of the lungs had followed. This opinion was to some extent borne out by the fact that the patient showed marks of scarified cups under the left breast.

In commenting on the above case, the editor of *Paris Médical* (*No.* 46) observes that it accords with what he has long ago published on asphyxia caused by enforced immobility of the tongue. If a patient's mouth be immoderately opened by means of a gag, the tongue can no longer move, deglutition of saliva becomes impossible, and the larynx is immobilized. Under these conditions rapidly fatal asphyxia can be produced. An instance of it has been observed. Satisfactory evidence may be obtained from the following experiment: Let the tongue be immobilized by placing a finger upon it, the mouth being opened or closed; or let the jaws be kept wide open by a bit of wood inserted between the teeth, and the result will be a respiratory anguish which, if prolonged, would lead to asphyxia.

Imagination a Cause of Death.

The following item will be of interest, since it seems to prove that imagination may obtain such control over a man as even to cause his death: "The coroner's jury who investigated the death of Frederick Miller, at the Second District police station, from the supposed effects of hydrophobia, adopted the view of Dr. Duvall, who attended Miller, that his death was due to exhaustion, the result of acute mania; in other words, that he frightened himself to death." We believe that imagination and fear really did cause death in this case. The man was bitten some time since by a small dog, and from that time up to his death he was constantly apprehensive that he would have hydrophobia. Finally, when he did die, the symptoms presented would not at all carry out the supposition of hydrophobia, and the verdict of the coroner's jury was perfectly justified by the facts.

Stretching of the Lower Dental Nerve—Cure.

At a meeting of the *Société de Chirurgie*, Nov. 18th, Mr. Polaillon mentioned the case of a man, 61 years old, who for several years had suffered from neuralgia of the fifth pair, medical treatment having failed in affording relief. Mr. Polaillon performed an elongation of the lower maxillary nerve on the 6th of September. The patient having been anæsthetized, the tissues incised down to the inferior maxillary branch, on a level with the lower dental canal, a small crown of 13 millimeters diameter was used with the trephine, and the nerve having been laid bare it was taken up on a hook, and stretched about 15 millimetres. A Lister dressing was then applied. Three days later there was a slight return of pain, which was controlled by anæsthetics. Since then there has been no relapse.

Special Reports.

No. II.—ON THE EXAMINATION OF DEAD BODIES IN SUPPOSED CRIMINAL CASES.

BY GEO. F. SOUWERS, M.D.

It not unfrequently falls to the lot of the practitioner to be called upon to testify or render an opinion in court, or before a coroner and his jury, in cases where there is more or less of an air of suspicion surrounding the circumstances under which a person has met his death. The physician, in some instances, fortunately, sees the deceased upon whose death inquiry is being made while the individual is yet capable of accounting for the events which resulted in the production of his wounds and bruises, and while he can yet tell his name, age, etc., etc.; but, unfortunately, it at times happens that the doctor does not reach the case until death has stepped in and left to conjecture the cause of the taking off. As coroner's physician, or as an expert, he is called upon to examine the corpse and to render an opinion as to the age, cause and time of death of the body found. Before considering the method of examining a dead body and the

observations to be made and inferences drawn, we will consider the case suggested in the first proposition spoken of above, namely, a man seen who is either in or rapidly approaching articulo mortis. In such a case the doctor should be very careful to weigh carefully every word uttered, not only by the sick man himself, but by every one, even to the youngest child, present; for it may happen that the old adage that "fools and children tell the truth," may receive an exemplification. He should be guardedly jealous of every word of opinion he utters, taking care to express no suspicions to any one, but noting all suspicions expressed by others, for one of two things may transpire from a neglect of these precautions. In the first place, if he unthinkingly utters his suspicions, it may transpire that the suspects may take alarm and escape before the law has an opportunity to lay its hand upon them; or if he is careless about noticing the suspicions of others, it may happen at times that very valuable clues may be lost; and in this connection it is essential that everything transpiring be committed, either *at once* or *as soon after as possible*, to writing, which writing should not be permitted to go out of his possession for a moment, as otherwise it might be tampered with or altogether destroyed, by those who might be compromised.

All statements made by a person grievously wounded or *injured*, where either suicide or the commission of a crime is suspected, as well as in all cases of accidents, as from a person being run over by a railway car, etc., etc., should be, where possible, *immediately* reduced to writing, then read to, and finally signed by the patient, in the presence of witnesses. We suggest that this precaution be taken where injuries are the result of accident, from the fact that not infrequently suit is instituted by the survivors, against corporations and individuals, for having, by their negligence, caused the untoward event to the deceased by which he met his death, whereas the declarations of the person himself may prove beyond peradventure that he was a contributor to his own death, by personal carelessness or risks run; while personal sympathy for the unfortunate surviving relatives, might tend to induce the physician to allow such claims to be made, on the common principle that corporations, etc., should be made to pay for accidents occurring to individuals in the transaction of business, yet he must remember that he stands in the light of a disinterested party; that he, as far as in him lies, must see justice done to each and all, and in prosecution of the duties of his position he is bound to use all reasonable means in his power to assist the law; and a court would be justified in expecting thus much of him. When dying declarations are made, the condition of the one making them should be closely noted; his temperature, nervous condition, mental state, etc., should be noted, in order that, if the question should arise during a trial, as to whether, at the time of the making of certain statements, the deceased was in a rational state; or whether either the attendant or the patient considered that death either was inevitable shortly, or that it was already upon the individual, a reliable answer could be rendered. Any expressions by or actions of the patient indicating that he had no hope of recovery, and that *he was satisfied* that he could by no possibility recover, should be observed by the medical attendant, for certain courts have held, at different times, that for the declarations of a person who shortly afterwards died of the injuries he was then suffering under to have the sanctity and binding force of an oath, they must be made with a feeling or knowledge on his part that he could not by any possibility recover. While this rule has been often set aside or rejected by the judges, in late years, yet no one can tell what question may come up in a criminal trial, or a suit for damages as against corporations, etc., and it is as well to have as *direct* and complete evidence as can possibly be obtained; it has been held that a dying declaration is fully as binding as an oath, from the fact that the awful sense of impending dissolution will so overmaster an individual as to compel him to speak the truth, no matter what revenges, etc., he might personally wish to gratify, or what benefits, as in cases of suicide to obtain an insurance money, he hoped to confer on his family, and which could only be obtained by making false statements, as when in the latter case a provision is in a policy providing against payment of the loss if a person die by his own hand, he should make statements that he had been wounded by others, while we might be supposed to accept the statement as that of a man about to go into the unknown, yet we should remember that there are individuals of such strong force of character that a fear of death would not turn them from a course decided upon to be pursued, and hence, the rule of the old courts would not hold; further, few men, no matter how desperately wounded, give up *all hope* of recovery so long as a spark of clear reason is left them; no matter how demoralized and morally panic stricken they may become in contem-

plation of the extent of the injuries sustained, they in some way, in ninety-nine cases out of a hundred, show that there is yet a lingering hope that all will be well with them. The principle may be summed up in the sentence that "*there must be a conviction of approaching death.** Care must be taken not to ask leading questions of a person under the conditions being considered. A leading question, roughly defined, may be said to be one that can be answered by the reply "yes," or "no;" for instance, to say to a man "It was John Smith who wounded you, was it not?" would be a leading question, for it would almost necessarily have to be answered in one of the two ways mentioned; the reason of this precaution is that a name or person being suggested to a dying individual, might readily be adopted and accused by him, without his hardly being aware of what he was doing, or the vital importance of the question he was replying to; in fact, in this way a person might readily be involved, through the spite and contrivance of others who wished to accomplish ends or revenges of their own. *If a medical attendant is satisfied that his patient will not recover, or that the chances are so decidedly against recovery as to amount almost to a certainty of death, in cases of the nature we are considering, it is his bounden duty to so inform the patient,* for if he does not, we question whether the law should not hold him responsible for such negligence as may result in a miscarriage of justice.

Let us go back and take up the second part of our first proposition, where death has already taken place before the physician's arrival, and starting from the time of entrance upon the premises, follow each step that should be taken in making a medical examination in cases of the kind under discussion. Upon entering, a physician should note carefully the condition and appearance of the surrounding ground or pavement, the steps, door knobs, and jams, and such wood work as might be able to furnish evidence of the manner in which and place at which the person had been wounded. For instance, the following story might be told and receive credence by the unsuspecting physician; that the man had committed suicide in the room in which the body is found; whereas, this story might be the veriest fiction, which could be demonstrated if it had been observed by the doctor that the ground in some locality close to the house had recently been trampled, or that blood spots had been seen on the steps, door knobs, etc., in parts of the house more or less remote from or leading to the place in which the body is found (we are supposing, now, that the person has died of open wounds); for if any of these conditions were found, it would be a fair presumption that the man had not died by his own hand, and in the place stated, but that others must have been concerned in the death of the individual, the blood stains being left by those who were concerned in the person's taking off, and who had carried the body to the place in which it was found by the doctor. The character of these stains and spots should be carefully noted, whether they have a daubed and streaked appearance, or whether they are such as would be caused by blood thrown from the open mouth of an artery; the question of the character of these stains might well be raised in a trial for murder, where the defence was that of suicide; thus a spattered condition of the walls and wood-work of a stair landing only, would of necessity show that an arterial wound had been inflicted before the entrance of the person into the room in which his body is found, and this circumstance might make a very material difference in the acquittal or conviction of a prisoner. Further care should be taken to notice whether the spots or stains have the appearance of freshness, or age, whether they are thoroughly dry, or whether they are still either decidedly wet, or so moist as to be readily rubbed off by a dry body, like the finger or a fine linen rag, for this, again, might be made to bear upon the question of how long a time has elapsed between the exudation of the blood and the finding of the body. If it were still in drops, or readily removable by a slight wipe, it is evident that it could not have been ex corpora for any length of time, or this condition would not prevail. Notice should be taken whether the furniture and hangings of the different apartments are in order, or whether they are disordered and torn; care also being taken to notice whether trunks, secretaries, or other articles likely to contain valuable papers, etc., are open, and having the appearance of having been searched; for a question of this nature might well arise, was there any reason to suspect that the deceased was murdered? either for the purpose of robbery or to secure papers, etc., the possession of which might be of particular interest to the parties suspected of the commission of the crime. In such a case it would be a matter of great interest to know the condition of pieces of furniture, etc., in which such papers would be likely to be kept. Upon approaching the place where the body reposes, care should be taken to narrowly, but

* "Taylor's Medical Jurisprudence," by Hartshorne, page 179.

in no way obtrusively, watch the emotions and behavior of those upon whom suspicion may fall, whether they assist, resist, or in any way attempt to put obstacles in the way of a thorough examination; for all these questions may arise in the course of a criminal trial, and may be used either to the damage or the benefit of accused persons. Before proceeding to examine the body, any instruments, ropes, keys, etc., broken china, or glass ware should be carefully looked for, examined, their condition being noted in writing, and placed in a secure receptacle, which should be retained in the possession of the physician till disposed of, as we shall discuss later.* Where the case has died of poisoning, without a physician having been present previous to death, all vomited matters, bottles, boxes, or papers of powders; whatever excretions, such as urine, etc., that are obtainable; portions of the last meal and drink partaken of by the patient; and any stained pieces of clothing, etc., used by the deceased, should be carefully preserved in air-tight jars (with glass stoppers or covers), sealed and labeled. In regard to food and drink, it is advisable to secure, not only a portion of the common dish from which all are supposed to have been served, but also, when possible, the remnants remaining on the particular plate, or in the cup or glass, of the deceased, for it has not been an unknown thing for a part, and not the whole, of a repast to be criminally prepared, where it is intended to get rid of an individual, and the finding of deleterious matter in one portion and not in another would be evidence of criminal intent on the part of some one.

(To be Continued.)

Correspondence.

Some Points in Malarial Fever.

Ed. Med. and Surg. Reporter:—

One of the most unfortunate terms ever introduced into medical literature is *typho-malarial*; unfortunate, because incorrect. Though it has been discarded by Dr. Woodward, the one who introduced it, the usage of the term is rife in malarious regions. Only a few weeks ago, I remarked to an intelligent practitioner that the malarial fevers of this year are of an unusually intense type. "Yes," he replied, "and there is no doubt they have associated with them a 'typhoid element.'" But, I answered, you do not think the specific typhoid and malarial poisons are conjointly at work in the same individual? He said that he did, and referred me to Dr. Woodward's work, as sustaining such a view. That man knew that Dr. Woodward had formerly enunciated such a belief, but he did not know that he had repudiated it absolutely, in a paper read before the International Medical Congress, at Philadelphia. Typho-malarial fever has no existence. Typhoid fever and malarial fever never exist contemporaneously in the same subject. Too often, in malarious regions, it is found *convenient* to apply the term typho-malarial to grave cases of remittent fever; or a simple malarial fever is said to "turn typhoid" when it assumes a dangerous aspect. It is a disgrace to the medical profession to have such opinions scattered among the people, and when one physician expresses such notions to another, it is difficult to tell whether his knavery or ignorance preponderate.

It should be known that few fevers are more malignant than the ordinary remittent, when improperly treated. It should also be known and remembered, that just as we have pernicious intermittents, so we have pernicious remittents, and that for such a fever to assume grave features or to end fatally it is not necessary to have it *become* either typhoid or typho-malarial. To have typhoid fever *modified* by a malarial element is quite another thing, but it does not become a separate disease. In the same sense do we see scarlet fever or whooping cough modified by a malarial element.

I have been thus definite with reference to this matter, because the notions that have been refuted are so exceedingly common in malarious regions. Throughout the malarial regions skirting the Susquehanna, the fevers incident thereto have been, during the season just passed, more than usually grave and stubborn. The only variation from the usual course, however, has been the intensity. In spite of the most effective treatment many cases have lasted from two to three weeks. As a rule, the attack would be preceded by a few days during which the patient would be warned of an approaching illness. He would say he felt tolerably well until a certain hour of the morning, it might be, but as the day wore on he would complain of lassitude, of inability to concentrate his energies. There would be more or less headache, with aching in the back and limbs. In a majority of cases the bowels were either constipated or relaxed. Thus on until the malady was fully developed. Sometimes it would be ushered in by a feeling of chilliness, never violent, in my observation. Again, the patient would deny ever having experienced the least coldness.

Upon examination now, the thermometer would record an axillary temperature of from 102° to 104°. There would be headache and backache of moderate intensity. Usually nausea, sometimes not marked for a day or two, but eventually coming on. Occasionally a case of the utmost gravity would run its entire course

* A case in point has just arisen in this city, involving the question of the finding of fragments of broken china. A woman was found dead in a room in a disreputable portion of the city, with certain wounds of the head, which might or might not be the result of a fall. She lived in this room with a negro, and it was in evidence that both partook, more or less freely, of liquor. The claim was that she had fallen to the floor and died; but on the floor the shattered fragments of a pitcher were found, with which it was charged she had been beaten over the head, inflicting mortal injuries. The case, however, has not yet come to trial, but we can see how one circumstance will bear on another.

without vomiting, but never without nausea. Sometimes the tongue would be coated thickly, but more frequently not.

Another marked symptom, and, according to the writer's observation, invariably present, was the gastric uneasiness. I say uneasiness, but it was frequently complained of as the most painful feature of the entire illness. In a majority of the cases under my care the patient would bleed from the nose once or twice during his illness. This feature was never noticed, except in those cases in which constipation was a marked condition. Except in one case, I never was able to discover the slightest moisture of the skin till near the termination of the disease. In fact, perspiration may be regarded as a harbinger of successful issue, and it also denoted the speedy breaking up of the disease.

As to the remissions spoken of in the text-books, and observed in cases of moderate severity, they were not noticeable after the first day or two of the disease. They were marked and regular, however, as the violence of the fever abated. I have been at much pains to ascertain this point. I should have noted the fact that sleeplessness was a prominent feature during the early days of most cases.

If the case did badly, the observer would notice that while, during the early days of the disorder, the whole system seemed to be laboring at high tension, there was now a very considerable depression of the forces, and if proper treatment were delayed, there would be developed a numbness of the extremities, delirium, picking at the bed clothes, extreme restlessness, twitching of the tendons, involuntary relaxation of the sphincters, etc. Many cases in this vicinity have assumed just such features and have terminated fatally.

Diagnosis.—As we believe the mistake most frequently made in the detection of malarial fever to be a confounding of it with typhoid fever, we shall simply discuss briefly the prominent points of difference. No matter what degree of severity may be assumed by malarial fever, we never have the tympanitic abdomen, nor any eruption, as we do in typhoid fever. We may have diarrhœa, though usually the opposite obtains. I met with one case during the past autumn, in which diarrhœa was a very troublesome feature; the patient would have from two to five or six loose actions daily. Again, the thoracic symptoms, so common in typhoid, are absent.

In the temperature record, too, we have valuable data; it is only necessary to remember the peculiarly uniform record of typhoid. In short, the difference is so great that careful practitioners can never err.

Treatment.—It seems to the writer that, at this day, no case of malarial fever, however grave, should terminate fatally. The mistake most commonly made is to purge the patient. I feel justified, by experience, in laying down the statement that a malarial fever patient should never under any circumstances be actively purged. The best results are obtained by letting the bowels entirely alone, save under a circumstance to be mentioned below. I need scarcely state at this day, that the one remedy to be relied upon is one or other of the salts of cinchona. But, above all, allow me to impress the fact that no conservatism should be practiced here. Whichever of the salts of cinchona you use, use it unsparingly and with a fearless hand. If you use sulphate of quinia, give it in from twenty to thirty grain doses, repeated from three to four times in the twenty-four hours. If it is vomited, at once repeat the dose, or administer it hypodermically, or by the rectum. I have learned by the frequent abscesses consequent upon the hypodermic method, to greatly prefer the rectal injections. If the remedy does not seem to be taking proper effect, a one-grain dose of calomel now and then will greatly favor its absorption from the stomach. Quinia so given has a vastly better effect than even the same quantity in divided doses. This can only be a question with those who have had no experience with the treatment by large doses. Now, let us glance cursorily at the diet, and at the treatment of the prominent symptoms. The patient will crave nothing; nothing tastes natural to him; and, as a rule, the best way is to urge no food while the fever rages in its intensity. After this, and during convalescence, allow him anything he may crave and feed him well, beginning, of course, with an easily digestible aliment.

The nausea in most cases will be intense and it is well to attempt relief, though you may try everything and be utterly foiled. Sometimes small doses of calomel (from $\frac{1}{12}$ to $\frac{1}{8}$ gr.), as recommended by Bartholow, will relieve. Warm water will in some cases produce the desired effect. I mention these two plans because they are most effective as a rule, *i. e.*, where anything will do good. The patient will experience great comfort, and not unfrequently great benefit, from bathing, or rather sponging with tepid water, to which has been added a little bay rum. This may be repeated from two to five or six times per day. He should be allowed a moderate amount of liquid, yet not as much as he sometimes craves; in general, the better plan will be to allow him to suck a moderate quantity of ice. Stimulants should not be given early, but upon the yielding of the malady will be found of advantage, according to the exigencies of each particular case. It is occasionally necessary to control the sweating of beginning convalescence, and in no way can this be better done than by a $\frac{1}{4}$ gr. of the ext. of belladonna once or twice a day. Of course, the sweating should not be interfered with, unless the condition or comfort of the patient demand it. The medicines which the writer is in the habit of using during convalescence are either the ferrated elixir of cinchona or Aitken's syrup of the phosphate of iron, quinia and strychnine.

Delta, Pa. J. W. Hickman, M.D.

News and Miscellany.

Utilization and Purification of Sewage Water.

On account of the numerous complaints from inhabitants on the banks of the Seine, below Paris, a commission was appointed by the Minister of Agriculture to investigate this subject.

The commission determined: 1st. That some immediate action should be taken to prevent the infection produced by the passage of the sewage

of Paris into the Seine. 2d. That the only system which, up to the present, has proven efficacious and stood the test of time, is the mixture of sewage with earth. 3d. That all excrementitial products should be excluded from the sewage, and then it could be mixed with the earth, on the Peninsula of St. Germain, under the following restrictions: The liquid should be allowed to flow over the land at regular intervals, and, as far as possible, each time the same quantity of sewage. Organic insoluble products should not be allowed to accumulate on the surface of the ground, but should be well worked in with the spade.

A system of drainage would be needed to allow the escape of the irrigating liquid, and chemical analysis of the water of the river below should be made, to determine if the epuration is perfect. The quantity of liquid for irrigating each hectare of ground could be determined later, after a series of chemical analyses.

Finally, it was resolved that a permanent commission of five members ought to be appointed to supervise these works, and see that all the conditions were faithfully fulfilled.

Remarkable Apparatus for Garroting Unsuspecting Physicians.

A new system of garroting has been invented in Berlin, by a most dangerous criminal of the name of Wilke, who, fortunately, is safe in the hands of the police. Recently two men, conscience stricken, presented themselves before the authorities, accusing themselves of having conspired with a locksmith (the man Wilke), to hire furnished rooms in different parts of the town, for the purpose of extorting money, in the following manner. One of them was to go to bed, pretending to be ill, and send for a doctor. As soon as the physician arrived and bent over the bed, an iron collar of a special contrivance, hid beneath the counterpane, was to be applied to his neck until he had signed a bill of exchange; then he was to be strangled and thrown into a canal which was close at hand. Wilke had devoted much ingenuity to the construction of this instrument, which they described as something like a pair of tongs or pincers fixed on the end of a long iron tube, with a winch at the bottom, by means of which the tongs could be made to close as tight as one liked. The peculiar virtue of this nefarious invention was to consist in preventing the victim from crying for help by immediately depriving him of the power of utterance. To make matters still surer, Wilke had also constructed two steel traps for the victim's feet. The conspirators had begun by hiring a room at No. 59 Elizabeth-Ufer, where the Schiffahrts-Kanal has an unusual width, and would facilitate the disposal of dead bodies. That very evening, the penitent accomplices declared, had been agreed upon for committing the first murder, and Dr. Lehrs, living close by, on the Kaiser-Franz Greædier Platz, was selected as the first victim.

As soon as this confession had been made, policemen were sent to the house mentioned, where they were told that a man who pretended to be employed in the Government Office for Weights and Measures had, a few days ago, hired a room and paid a fortnight's rent in advance, but that he had not shown himself since; he had, however, sent a trunk into his room the day before. The directory having been referred to, and showing that no person of the name of Wilke was employed in the office in question, the constables proceeded to open the trunk, in which they found two man-traps and all the component parts of the garroting machine. The trunk was carefully reclosed, and the landlady warned not to say a word about the visit. An agreement was then come to between the police and Wilke's two accomplices, that the latter should at first assist their comrade in carrying out his diabolical plan, and only turn round upon him when the victim's life was in danger. Several constables were concealed in a neighboring room, and at seven Wilke appeared, entered his bed-room with his confederates, went to bed, and sent for Dr. Lehrs. Instead of the latter, a policeman came in disguise, and inquired after Wilke's health. The ruffian at once sprang up and applied his pincers to the pseudo physician's neck. The latter, having managed to make Wilke understand that he had very little money about him, he was requested to fill up a check. On his refusal, Wilke turned the winch, until the victim began to be afraid for his life, and began stamping on the ground. This was the signal for the accomplices to let the constables' hands loose, and for the police to enter and seize the criminal in the very act.

The Coming Sanitary Exhibition in Berlin.

An exhibition of books, models and drawings relating to hygiene and safety appliances will be held in Berlin from June to October next, in which American inventors, scientific and industrial men, institutes, boards, etc., interested in sanitary enginery, are solicited to participate. Inventions and machinery for cleaning streets, providing towns with water, lighting, public baths, plans of tenement houses, factories, heating and ventilating systems, food products, steam, horse and electric railroads and kindred appliances will be largely displayed. In addition to these, plans for life-saving by fire, protection against lightning, inundations, explosions, mine accidents, and art works and pencilings will be included. The exhibition is managed by a chief committee, composed of a number of prominent practical and scientific men and able officers, under the presidency of the Staatsminister, Dr. Hobrecht. They are assisted by special committees in all larger towns of Germany, Austria and Switzerland, consisting of the leaders in the different departments of sanitary engineering. Dr. Bruno Terne, of No. 20 South Delaware avenue, is in possession of the plans and details of the exhibition.

Dead and Missing for 1881.

The death-roll of the Coroner of Philadelphia for 1881, embracing a list of 1915 cases, shows that 108 persons died during the year without leaving a single clue to establish their identity. Of this number 67 were infants abandoned at birth; 38 of the

unknown were men and 3 were women. Twenty-seven bodies were found floating in the river, the greater portion of whom were suicides, and five men were run over by the cars. The records of the Police Department disclose 195 cases reported as missing or having run away, 45 of whom were afterwards found. Fully one-half of this number were boys and girls who, having drunk in the inspiration derived from reading dime novels and other productions of that character, ran away from home to seek fame and fortune.

A Fatal Disease Contracted from a Horse.

A curious suit for damages has been brought against the Hestonville, Mantua and Fairmount Passenger Railway Company, by Widow Mary Loughrey. Michael Loughrey, who was Mrs. Loughrey's husband, was employed as a driver by the company, early in 1880. The horses attached to his car, it is alleged, were afflicted with glanders. Michael contracted the disease. Dr. D. Hayes Agnew and other eminent physicians were called in, but they could not control the malady. Loughrey suffered intensely for about six weeks, when he died. Mrs. Loughrey claims that the company was legally obliged to employ horses of sound health. She claims $20,000 damages for her husband's life, sacrificed, as she charges, through the company's neglect.

Items.

—*Braithwaite's Retrospect* for December, 1881, quotes the MEDICAL AND SURGICAL REPORTER fifty-four times.

—The female wards of the Norristown Insane Hospital are under the charge of a female physician. Since the County Medical Society have decided to admit women to membership, it seems perfectly proper that they should be given an opportunity to demonstrate their capacity for public professional positions of trust. Furthermore, this lady physician is said to have been very successful in her moral treatment of those under her care, and to have acquired wonderful influence over them.

OBITUARY NOTICES.

—Dr. William E. Butler, a staff officer of General Jackson in the war of 1812, died at Jackson, Tenn., a few days ago, aged ninety-two years. Once he was defeated by Davy Crockett for the Tennessee Legislature. He owed his defeat to the fact that he had carpet on his floor. Crockett proclaimed from the stump: "Why, my fellow citizens, my aristocratic and wealthy competitor walks every day on store goods finer than any of your wives or daughters ever wore."

—Dr. Orlando Fairfax was found dead in his bed on the morning of January 11th, 1882, in Richmond, Va., where he had resided since 1861. Born in Alexandria, Va.; he was a graduate of the Universities of Virginia and Pennsylvania. He was member of the younger branch of Lord Fairfax's family, and was 76 years old at the time of his death.

—Dr. George W. Pape, of Baltimore, son of the well known German physician, Dr. G. Edward Pape, committed suicide on January 8th, by taking morphine. The young man had suffered from malaria for two years, in consequence of which he was very much depressed in spirits, and in a fit of utter despondency he committed the deed.

QUERIES AND REPLIES.

ED. MED. AND SURG. REPORTER:—

Dear Sir: Will you be kind enough to send me a formula for a good *embalming* injection, and state about the portion necessary for *one body*. Is chloride of zinc or arsenious acid the best? Please favor me with an answer and greatly oblige. W. N. SHERMAN.

Answer.—Prof. Leidy, of the University of Pennsylvania, informs us that the neutral chloride of zinc, as prepared by Powers and Weightman, is the best injecting material. About two quarts, with half that quantity of water, will usually suffice for a body, but Professor Leidy adds, to inject as much as the vessels will contain. Arsenic makes the body look more natural, but will not preserve it so long. The chloride of zinc, as given, is what they use in the University to preserve and keep bodies through the summer.

MARRIAGES.

HERITAGE—CLARK.—On January 6th, 1882, at the M. E. Parsonage, Mantua, N. J., by Rev. W. Williams Christine, Paul S. Heritage, M.D., of Mantua, and Miss Emma M. Clark, of Wenonah.

KRISE—BEETEM.—On Tuesday evening, October 4th, 1881, in the English Lutheran church of Carlisle, by Rev. C. S. Aibert, assisted by Rev. A. H. Kremer, D.D., C. Worth Krise, M.D., and Miss Emma F. Beetem, both of Carlisle.

LEWIS—COOPER.—December 20th, 1881, at the residence of the bride's parents, by the Rev. Robert Edwards, Joseph Cresswell Lewis, M.D., of Frankford, Philadelphia, and Miss Eliza Campion, daughter of William Penn Cooper, Esq.

LOGAN—OLMSTEAD.—In Scranton, Pa., in the First Presbyterian Church, December 29th, 1881, by the Rev. S. C. Logan, Harry V. Logan, M.D., eldest son of the officiating clergyman, and Mary M., only daughter of Richard W. Olmstead, Esq., of Scranton.

RANKIN—McCLELLAND.—November 29th, 1881, by Rev. William M. Taylor, Dr. J. M. Rankin, of Richland, Kalamooza county, Michigan, and Miss Martha A. McClelland, of Mount Jackson, Lawrence county, Pa.

STARR—BROWN.—In New York, on Monday, December 26th, 1881, at the East Baptist Church, by the Rev. H. G. Mason, Dr. Alfred R. Starr and Miss Lizzie L. Brown.

TAYLOR—PAUL.—At the residence of S J. Paul, December 1st, 1881, by Rev. J. L. Thompson, assisted by Rev. J. M. Jones and Rev. S. M. Good, Dr. A O. Taylor and Miss Maggie J. Paul, all of Delmont, Westmoreland county, Pa.

TORBERT—COOK.—January 6th, 1882, at the residence of the bride's parents, by Rev. P. H. Mowry, Dr. E. G. Torbert, of Driftwood, Pa., and Kate S. Cook, daughter of Jesse Cook, of Philadelphia.

DEATHS.

HASBROUCK.—In New York, on Wednesday, December 28th, 1881, Stephen Hasbrouck, M.D., in the 88th year of his age.

KNOWLES.—At Clifton, Delaware county, on December 26th, 1881, Henry B. Knowles, M.D., aged 22 years.

SHEARER.—At Dillsburg, Pa., December 14th, 1881, James M. Shearer, M.D., in the 48th year of his age.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1300.] PHILADELPHIA, JANUARY 28, 1882. [Vol. XLVI.—No. 4.

Original Department.

Communications.

CLINICAL CASES OF SURGICAL DISEASES OF WOMEN.

BY ROMAINE J. CURTIS, M.D.,

Of Joliet, Ill.

Restoration of the Perineum.

Case 1.—Mrs. ——, aged twenty-six years. Three years before I saw her, this lady was delivered of a hydrocephalic child—a still birth. The feet presented, and forceps were applied to the head, effecting its delivery, with the result of producing a complete laceration of the perineal body, and of the septum through the sphincters. From date of the injury this lady experienced the usual sequent miseries of this injury. She had no voluntary control over the sphincter function of the bowel, and had prolapse of the bladder. She was confined to the house, and generally to the bed. During this time she lost weight and color, and began to cough, and had chills and night sweats. Her mother having died at an early age with consumption, this disease was reasonably feared by the patient and her friends, in her own case. I was called to see her on account of her lung disease, and found a condition of her right lung which, I believed, indicated fibrous phthisis. She told me nothing about her injury until the fact was developed by inquiries relating to the uterine organs. On examination, I found the condition as stated. I advised the patient to have the perineum restored by operation, and afterward to take a trip to Colorado, for her lungs, to which she and her friends assented. In the surgical treatment of this case I followed the method practiced and advised by Dr. T. H. Emmett in his truly great work on gynæcology. As a preparation, locally, for the operation, vaginal injections of hot water were used daily for about two weeks, and sesquioxide of iron was given internally.

On the fourth day before the operation a laxative was given, which was repeated daily, the last dose being given the evening before. The intestines were as empty as they could be made, which plan is most decidedly a great improvement over the old one of giving a cathartic only the day before the operation. At six o'clock in the morning two grains of opium were given, and at nine o'clock the operation was performed.

The patient took ether very kindly, and when under its influence I removed the cicatricial tissue and as much of the vaginal mucous membrane as was deemed necessary. The rent in the septum was so great that the apex of the denudation in the mucous membrane was well up in the *cul de sac* behind the cervix. During this part of the operation the bleeding was excessive, several vessels being cut, and the capillary bleeding being greater than was expected after the prolonged use of hot water. I have since learned enough to know that the sesquioxide of iron contributed to this result, as it inhibits the vasomotor contractors, and I have lately used it in angina with better success than is given by nitrite of amyl. To control the bleeding, hot water was used by one of the assistants, at first with a sponge, and then with a syringe. The two physicians who assisted in the operation and I, soon learned to keep a stream of hot water following the cut of the scissors; but for this the operation would have been almost impossible. The

surface denuded was unusually large, and eight silver sutures were used. The first suture was placed in that relation to the sphincter which insures its union, and which was demonstrated by Dr. Emmett, and is difficult to explain without the aid of the diagram given in his book.

The last suture was inserted through the vulva and passed through the mucous membrane above the denuded surface, which drew the membrane over the vaginal portion of the surfaces, where union was hoped for. The placing of the lower and upper sutures in this manner, with the object of placing the torn edges of the sphincter in apposition in one case, and of protecting the uniting surface from the septic influence of vaginal biological ashes in the other, are certainly strokes of a gynecological genius.

On the sixth day after operation the two middle sutures were removed; the remainder were removed on the twelfth day, and the union was perfect. Injections were given, to render the contents of bowels soluble, and they were moved without injury. During the twelve days, one-half a grain of opium was given daily, which was sufficient to prevent any action of the bowels, and vaginal douches, carbolized, were also used daily, and the urine drawn twice a day, great care being used to avoid getting any urine into the wound.

The general health of the patient began to mend as soon as she was out of bed. She gained flesh, got a good color, and went to Colorado for six months. The lung disease was subdued, so far as any active manifestation goes. It is now three years since the operation was made; the lady during this time has again become a mother, with very little injury to the perineum, and her health is good.

Case. 2.—Mrs. —, was aged twenty-two years when she was delivered of her first child. Her *accoucheur* was a member of the hybrid, homœopathic, "new school" of medicine. The perineal body, as a result of this labor, was torn through, as well as the external sphincter muscle. The sequences of the injury were: A limited control over the sphincter function, and prolapse of the uterus, the cervix of which was somewhat lacerated. The patient attributed her misfortune entirely to the fact that her physician during the bearing down pains kept straining the perineum backward with his fingers. On questioning her, I learned that she was delivered while lying on her left side, with thighs flexed, which position, combined with the efforts of her physician, were certainly proper antecedents to such a calamity.

I wish here to contribute a mite toward the literature of management of the perineum during labor. It is obvious that the perineum serves a purpose in the mechanism of labor, and other things being equal, does not require the support so much talked about in the text books. The benefit of such support—pressure with the hand—having the effect to aid the perineum in giving the head a forward direction, describing a curve around the pubis. It is apparent that if this direction of the head is maintained there is so much less danger to the perineum. The course of the head through the pelvis, in the direction of the curve of Carus, is in great part due to the anatomical conformity of the pelvis; but the office of the perineum is to continue the course of the head in the circle of which the curve of Carus is a segment, and the opposing force to this perineal force is the pubis. It is, then, a deduction from these facts, that support of the perineum means aiding the perineum to continue the course of the head in the direction of a circle which is continuous with the curve of the pelvis. It is a further deduction, that straining the perineum in the opposite direction directly interferes with the mechanism of labor, and as directly endangers the perineum. Another factor in the support of the perineum is the position of the parturient woman. It may easily be demonstrated that the woman, when the head is describing the curve around the pubis, should lie with her thighs extended. If the finger of the *accoucheur* be inserted between the head of the child and the perineum, and the woman's thighs are flexed, the tension of the perineum is felt to be greater than when the thighs are extended, other things being equal. If this demonstration proves anything, it is, that flexure of the thighs upon the abdomen increases the curve of Carus very notably in that portion of its course bounded by the perineum, and that flexion of the thighs during delivery of the head and shoulders directly increases the danger to the perineum. I have never attended a parturient woman who suffered rupture of the perineal body to any notable extent, which fact I attribute to the reason that I discovered the facts as given, relating to flexion of the thighs and tension of the perineum, in the third case of labor which I attended, sixteen years ago—a primipara, thirty-eight years of age, during whose labor the head remained two hours in a position which partially distended the perineum. This discovery, I suppose, has been made by many physicians, but I never happened to see the record of it.

In this case the operation for restoration of the

perineum was made by the older method. Instead of cutting away the cicatricial tissue and the mucous membrane, the epithelial tissue only was removed and the silk quill suture used. The union was not as complete as in Case 1. To all appearance, as manifest to touch, the perineal body was intact; but a communication existed between the vagina and external perineum, along which water could find its way when injected into the vagina. The patient, however, was cured, by the operation, of the prolapsus and the inconvenience relating to the bowel.

Restoration of Cervix.

Case 3.—Mrs. —, when I saw her, in February, 1880, was forty-two years old and the mother of five children, the youngest seven years of age. This lady is a native of England, and her physician in London was the famous Dr. Richardson. I was called to see this patient on account of an attack of menorrhagia. I made no examination, as the proposition to do so was thought by her to be unnecessary, as she stated these attacks had been repeating themselves at intervals during the last two years, and she thought they were due to approaching change of life. I prescribed large hot water vaginal injections and a preparation of ergot and digitalis, to be taken in a decoction of cinnamon.

In two weeks I saw patient again, and was obliged to use the tampon. I discovered, by digital examination at this time, that she had a complete laceration of cervix. I found it necessary to tampon vagina several days, and learned by repeated examinations that the cervix was split entirely, and its lateral halves were, so far as could be determined by touch, continuous with the vaginal walls. I confess that I was nonplussed by the case as felt at first, for, sliding my finger up the vaginal wall, I would find no evidence of a cervix, or Douglas *cul de sac*, but my finger would pass up into the cavity of the uterus, which fitted it like a cup thimble. I had never seen a laceration so extensive, and was unprepared to know the meaning of the tactile sensation. I became satisfied, however, what the condition of things must be, and in a few days, the bleeding having ceased, I made an examination with Sim's speculum, and found that I could see the fundus uteri, as well as feel it, there being no external or internal os. With two hooks I brought the halves of the cervix from, apparently, out of the vaginal walls, and drawing them together the form of the uterus could be seen. The perineal body was also lacerated, and the fundus of the uterus—the inside of it—was about two inches above the vulva. I explained the nature of things to the patient, who remarked that Dr. Richardson said she was ruptured, and had proposed an operation to relieve her before she left London. The cervical mucous membrane was congested, and pricking it let out an abundance of gelatinous substance.

I told the patient that her life depended on the restoration of the cervix, and two months were occupied in the preparatory treatment and unavoidable delays. The treatment consisted in administration of ergot, digitalis, and dialysed iron; a daily vaginal douche of a gallon of hot water, and application every third day of compound tinct. of iodine to the cervical membrane and uterine cavity. There were frequent and severe hemorrhages during this period of preparation, and for twenty days, in the aggregate, I was obliged to use the tampon. A notable feature of this treatment was the hot water injections, which were performed with the ordinary Davidson's syringe, using one gallon of water at once, and which was, of course, injected directly into the uterine cavity, without a symptom of the usual uterine colic which follows sometimes the advent of a small quantity of water into the uterus. There was apparently no more sensation, in character or degree, in this patient's uterus than was afforded by the vaginal walls. The patient could distinguish her menstrual hemorrhage from other paroxysms of bleeding by the backache and other sympathetic pains, and the operation was appointed on the fifth day after accession of menses, providing the flow could be stopped. At next menstruation she was tamponed, as usual, and seven days passed before she was ready. At this time a physician sent her word that he could cure her without an operation, and in consequence the operation was delayed until ten days before the time for her next menstrual period. The operation was made as Emmett directs: the cicatricial and mucous membrane being removed, leaving a space for the cervical canal, the two halves were brought together, and eight silver sutures were used. On the fourth day after the operation she began to flow, which I supposed would destroy the hoped-for result of the operation. The flow continued about six days. I left the sutures in place fourteen days, hoping union might occur, when the patient had an attack of winter cholera, which came on at night, was very severe, and when I reached her she was collapsed, almost pulseless, and was, to all appearances, a hopeless case. Her family and friends were around her in the attitude of mourners, and I never saw so pale and exsanguined a surface

as she presented. I gave her, hypodermically, morphia sulph. gr. $\frac{1}{8}$ and atropia sulph. gr. $\frac{1}{70}$, the remedy which I relied on for winter cholera. She began within an hour to rally, and recovered from the attack. She was plied with beef extract and brandy until the eighteenth day from date of operation, when I removed the sutures, fully expecting to see the parts separate, but to my great surprise the union was perfect. At her next menstruation the patient declared she was "more natural than she had been at any time since she was twenty years old." She has been healthy ever since and has gained thirty pounds in weight. The uterus occupies the normal position in the pelvis, notwithstanding the perineal body is gone.

Case 4.—Mrs. —, was married at the age of thirty-eight years. She was small in stature, light in weight, had always been a subject of neurasthenia, with neuralgic manifestations, but never had any of the zymotic diseases, or acute sickness, and yet says she never had a well day.

Within a year after her marriage this lady was delivered of a ten pound boy, by aid of forceps, and the cervix was completely lacerated. In this case the split was not midway in the cervix, but the anterior portion was about half the thickness of the posterior. The two sides rolled out, after the manner of a celery root when split in the axis of its length. The laceration extended upward on the external surface of the cervix to its junction with the vaginal walls, and internally extended through the internal os. The sequences of this injury were entirely referred to the nervous system, and the only discomfort was neuralgia, which appeared to extend throughout the whole sensory nervous system connected with the pelvis. The pain was nearly constant, and confined her to bed. Sleep could only be procured after great exhaustion from wakefulness and suffering, or by chloral. At the end of the second month the cervix was restored by the same method as in the previous case, but without an untoward symptom. The sutures were removed on the tenth day and the union was found perfect. The restoration of the cervix cured the pelvic neuralgia, and her general health is much better than before her marriage.

Case 5.—Mrs. — was twenty-eight years old when she was delivered of her first child, by forceps, with the lamentable sequence of unilateral laceration of the cervix and complete rupture of the perineum. Her physician told her that the accident was due to the fact that the child had no soft spot in its head. I suppose he referred to the condition of the fontanelles. He, however, immediately inserted silver sutures, and to all appearance the perineum was united, and the medical gentleman assured the patient that the like was never known before. I saw the case three months afterward. The patient was emaciated, had loss of appetite, indigestion, and the urine loaded with phosphates. She referred her local distress to the bladder, stating she not only had difficult micturition, but could not sit, except on one of the nates, or rather one hip, frequently changing from one side to the other, on account of painful sensations produced in the bladder.

On examination, I found that the perineal body was not united, but there was a union of the integument of the perineum, which bridged across the chasm, and somewhat resembled the web of a goose's foot. The uterus emitted a discharge of acrid, purulent matter, and was prolapsed, resting between the severed halves of the perineal body. To relieve the sensation of bladder distress I cut the bridge away with scissors, which allowed the patient to sit upright, by removing the tension from the integumentary perineum, and proceeded to prepare her for restoration of cervix and perineal body. These operations were completed in due time, without misfortune or hindrance, and the patient recovered her health. She has since given birth to her second child, during the labor for which the perineum remained intact.

Case 6.—Mrs. —, when I saw her, was aged nineteen years; had been married three years; and a year since gave birth to a child. Since then her health had materially deteriorated. She was subject to hystero-epilepsy, and was at times quite maniacal. There was a bellows murmur, heard loudest over the apex of the heart. She never had rheumatism She complained of an acrid vaginal discharge, which caused great irritation, and had been treated for ulceration of the cervix, without benefit. I detected a unilateral laceration of the cervix by digital examination, there being so much vaginal inflammation that I could not use a speculum. She was directed to use hot water vaginal douches, and returning in two weeks, a speculum examination was made, which verified the existence of the laceration. The lacerated surfaces were secreting pus of an acrid character, which kept the vaginal mucous membrane in a condition of inflammation. Topical applications of the comp. tinct. of iodine were made daily to the wound, and punctures with a sharp lancet as often, to let out the gelatinous matter. The parts appearing ready for the operation, the day was

appointed, but while getting ready, owing to excitement, the patient had an attack of hystero-epilepsy, which postponed matters. This occurred the second time, when I adopted the strategic move of making the operation without foreknowledge on her part. The patient was placed, as usual during her local treatment, in Sim's position. I quickly denuded the surface, but trouble began in patient's head before I could insert the sutures. I took a cup pessary, and applying it over the cervix, packed the vagina with a cotton tampon, fixing thereby the stem of the pessary. The patient was accustomed to applications of cotton glyceroles, and with additional persuasion became quiet. The next day she was informed of the condition of matters, and remained quiet in bed. Every other day I removed and replaced the cotton tampon, carefully keeping the cup pessary in place by holding the stem. This procedure was kept up for ten days, when I ventured to look at the cervix, and had no reason to be dissatisfied with the result. The surfaces were united. The patient was put on increasing doses of bromide of zinc, which, together with a change of climate, worked a cure.

SOME POINTS IN REGARD TO TROPHIC NERVE CELLS.

BY J. S. WIGHT, M.D.,

Professor of Surgery at the Long Island College Hospital.

Written for the MEDICAL AND SURGICAL REPORTER.

(*Concluded from p.* 64.)

Let me reason from our premises a little further: Is not the molecular motion in the cells of a muscle transformed into the molar motion of the bone to which it is attached? But these muscle cells received molecular impulses from nerve cells by the way of nerves. Now, suppose that the cells of a muscle are so arranged that their molecular motion cannot, as it were, be added up into a visible motion; then there would be simply molecular motion in the muscle. And because the molecular motion is invisible, can we conclude that such motion does not exist? And can we say that such motion, if it does exist, has no relation to nutrition? We might just as well say that heat has nothing to do with nutrition, when we know that nutrition stops without heat. But our supposition exactly fits the case of any cell that is not a muscle cell. That is, a nerve cell may be co-related to a cell, and be associated in the work of making simple molecular motion in that cell; that is, a motion that does not eventuate in molar motion; and, from all that we can know, this molecular motion is intimately concerned in the process of nutrition.

Now, let it be assumed that a Pacinian corpuscle envelops the end of a single nerve, and that the nerve has a sensory function. It is true, that the end of this nerve is enclosed, at times, by as many as sixty capsules, made up of a great number of fusiform cells, which, to some extent, resemble the cells of the connective tissue. There are two points to be noted in regard to these envelopes of a Pacinian corpuscle: (1) As the nerve end seems to be concerned with the sense of touch, the mechanical influence of an impinging body is transmitted through the fusiform structure of the capsule to the nerve end, and correlated into a motion that can go along the axis cylinder of the nerve to the nerve cell at the other end of the nerve. Indeed, the conditions here are somewhat like the conditions relating to the cornea. The cornea is transparent to a certain kind of molecular motion, and the Pacinian corpuscle is transparent to a certain kind of mechanical motion. The fibrils of the nerve are in a bundle in the Pacinian corpuscle; the fibrils of the nerve are separated in the cornea.

(2) It is quite evident that the nerve cell at the other end of the nerve, through the nerve which penetrates the Pacinian corpuscle, as it were, presides over the multitude of cells that go to make up the investing layers of this capsule. That is, there is a very considerable territory of cells, in some way coördinated with a single nerve cell. And, in regard to this coördination, it would make no difference whether a sensory or a motor nerve penetrated the Pacinian corpuscle; break up this coördination, and the nutrition and the function of the part would be disturbed. And in regard to the cell territory, it more and more appears that the destiny of nerve cells is to preside over such territories. But there are certain *possible* exceptions to this relation, which may be intimated as follows, namely:—

(1) In the early life of the embryo, so far as we now know, there are no nerve cells—surely there are no nerves; the cells appear to be all alike; and yet there are cells that are destined to be nerve cells, or the antecedents of nerve cells, and have nerves. But yet is it not a matter to be considered, that the primitive cells of the embryo are in some way co-related to the complex nervous organism of the mother? Who does not know about the strange results to the embryo coming from disturbances of the maternal nerve cells? Can we then say with confidence

that the cells of the embryo are nourished and proliferated without the intervention of nerve cells and nerves? Note in this connection, the extraordinary development of the peri-uterine sympathetic system during pregnancy. It seems to be the fact, that the cells of the embryo constitute for a time a kind of outlying territory, that is still under the domination of the maternal nerve cells, in an indirect manner. Well, if these things are so, our first exception is not a real exception.

(2) In the blood there is the most active nutrition going on constantly, and yet there is no anatomical connection between the nerve cells and the blood cells. But there is a dynamic relation at most times between the blood cells and the nerve cells, as well as other cells in various parts of the body, and the nerve cells would not get along without the blood cells, any more than the blood cells would get along without the nerve cells.

We may, therefore, truly look upon the blood as containing a community of cells, which are not continuous with any nerves in an anatomical way, but which are related to nerve cells, and we may affirm that there is a correlation of energy constantly going on between these two kinds of cells. And so far, indeed, as respects the blood, do the nerve cells have a trophic function.

(3) In *granulation tissue*, where, to be sure, we do not find nerves, there is a remarkable activity in the elements of the protoplasm, in which not only nutrition, but also proliferation is taking place. And I may ask, who is ignorant of the fact that granulation tissue is apt to form either badly or not at all, in paralyzed parts? Are not the tissues on which granulation tissue begins to form full of nerves? And is not granulation tissue very often tender and painful? Well, very briefly let me say, that granulation cells and nerve cells are not only co-related, but they are also correlated. The granulation cells constitute an outlying cell territory, that we may in some sense liken to primitive embryonic tissue. And yet the granulation cells have the capacity to be affected by the influence of that most highly differentiated cell—the nerve cell. And this means, that the trophic powers of the nerve cell are concerned with the *trophic* powers of the granulation cell. Let me add, that what has just been said of young scar tissue may also be said of adult scar tissue. And so again, if these things are so, our second and third exceptions are apparent and not real exceptions.

And in this connection let me say, that the formation of granulation tissue in parts that have lost sensation and voluntary motion takes place, in all probability, under the constructive influence of the ganglionic nerve cells, as well, perhaps, as under the influence of integral spinal cells below the pathological severance of the cord. In the next paragraph a case will be introduced that will illustrate this interesting point.

The following case of fracture of the dorsal spine is quite fully reported on page 799 of the American edition of "Holmes' Surgery." A shoemaker, twenty-four years of age, fell from a second floor window, broke his back near the middle, causing loss of motion and sensation in both lower extremities, and in a little more than four months recovered, except there was a defective sensation in a small part of the right leg. For seven years he was well and active; in the next year he had a fever, and a pain in the back; for five years more he continued in good health; he then began to have progressive paraplegia, and finally was bed-ridden, having extensive sores on his hips. The sacrum, ischia, and trochanters were foul and sloughy to a great depth, and did not cause any pain. Diet, stimulants, quinine, opium, and a water-bed, gave the patient considerable strength. The bed-sores, which were dressed chiefly with the balsam of Peru, filled with healthy granulations, and cicatrized as quickly as in the soundest constitution. Near his death, which followed extreme exhaustion, he had profuse perspiration on the parts of his body that were not paralyzed.

The post-mortem examination disclosed a fracture of the fifth dorsal vertebræ; a degeneration of about two and a half inches of the cord; an obliteration of the corresponding nerve roots; and the upper and lower parts of the cord held by connective tissue and the pia mater.

In this case may be noted some interesting points:—

(1) The nerve cells of a considerable part of the cord were disintegrated. It would seem that the nerve cells did not inflame, nor proliferate under the stress of a prolonged irritation. Indeed, there was no repair of nerve structure and no restoration of nerve function; for when the nerve cells perished no new nerve cells took their place. And it appears that highly differentiated cells have not the same ability to proliferate as the cells of the connective tissue.

(2) Some of the original connective tissue remained in and around the obliterated part of the cord, and some new connective tissue was added thereto, as it were, in the form of scar-tissue. *Here there was inflammation and proliferation as well.* And we may note the difference between

the connective tissue and the nerve tissue under the influence of an irritation. The connective tissue cells live and increase in number, and the nerve cells perish; and may we ask, *Which cell is the fittest to survive?* In fact, the cell that survives is the one of lowest differentiation.

(3) But, as Brown-Sequard and M. Charcot would say, the point of capital importance was the irritation, or the inflammation, that supervened in and around the cord. The irritation and the inflammation were connected with the bed sores; but how were they connected?

During a long time the nerve cells of the injured part of the cord did good work; but during a long time, the time of progressive paraplegia, the nerve cells of the injured part of the cord did imperfect work. Now we may suppose that in the degenerating spinal cells there was an irritation which was communicated in some way to the cells of the sympathetic ganglia and to the cells of the cord below the injury; and we may infer that there is an irritation communicated to various cell territories to which certain nerves are distributed—an irritation coming from the degenerating nerve cells of the cord, and from the disturbed nerve cells of the sympathetic ganglia and the cord below the injury. In fact, there was a disturbance of the normal coördination of work between the nerve cells of the ganglia and the cord; and there was a disturbance of the correlation between the nerve cells of the ganglia and the cord on one hand and the cells of certain outlying territories of the body on the other hand, so that many of these cell territories perished. But the most significant part of this case, perhaps, consists in the fact that the bed sores went through a most laudable process of cicatrization after the complete degeneration of the cord for about two and a half inches, and during all this time the patient was approaching his death step by step. There was a complete structural and functional severance of the cord, but the sympathetic ganglia remained intact. And we may suppose, in the most reasonable manner, that the nerve cells of the sympathetic ganglia continued to do good work after they were no longer irritated by the degenerating nerve cells of the cord; and we may also suppose that the nerve cells of the lumbar enlargement of the cord performed some laudable work after the death of their neighbors in the cord above. In fact, we may suppose that the nerve cells which were left performed their own work as well as they could under the circumstances, and may be, tried to perform the work of the degenerated nerve cells. And yet, it may be remarked that, though the scar tissue seemed to form well, there was something radically wrong in the nutrition of the cell territories in general, for the coördination of the cell work of the body was so far disturbed that the nutrition could go on no longer.

In this case there was finally a total loss of sensation and voluntary motion, which, as a matter of course, had something to do with the derangement of the nutrition. And in this place the attention may be fixed for a moment on the fact that the sweat glands had lost their function below the seat of the injury, and that above the seat of the injury they had come to have a very exaggerated function. In what way this disturbance of the sweat glands took place it is only possible to conjecture; however, the disturbance relates to the nutrition. But yet it would seem competent for us to conclude that the irritation of the nerve cells of the sympathetic ganglia had very much to do with the production of the bed sores, and that, when this irritation had ceased, the bed sores cicatrized under the influence of healthier nerve cells.

(4) Let me point out what I have often observed in fatal cases of spinal injury, that the nutrition of the parts paralyzed is so deviated from its normal procedure as to be competent to give off abnormal waste products, which will impede the proper nutrition of the parts above the seat of the injury. There is, as it were, a kind of degeneration going on in the cells of the parts that have been paralyzed, and death at last takes place, mostly from extreme exhaustion and a kind of septic poisoning. At any rate this goes to show that the cells of the sympathetic ganglia, whatever their function, have, indeed, a coördinate relation with the cells of the cord; and that the sympathetic cells cannot do their work properly apart from the spinal cells; and that the spinal cells cannot properly carry on their functions without the aid of the sympathetic cells.

In fact, it may be set down that there is not only a co-relation, but also a coördination between the cells of the spinal cord and the cells of the pre vertebral ganglia, and that special cells perform special work, and that some of the special work performed is *trophic* work. And it may also be set down that there are special ganglia co-related and coördinated, not only with the pre vertebral ganglia, but also with the gray matter of the cord, such as the semilunar and renal ganglia, as before noted, and that these ganglia have also special work, some of which work is indeed trophic in its nature. And so we

surely arrive at the conclusion that the *trophic nerve cells* are not all in the gray matter of the cord, but that some of these cells are to be found in the gray matter of the sympathetic ganglia. We also arrive at the conclusions, that in the correlation of some nerve cells and muscle cells molecular motion eventuates in molar motion, and that in the correlation of some nerve cells and certain other special cells, molecular motion continues to be molecular motion. And the fact that we cannot see the motions of nutrition, and that we can see the motions of progression, does not prove that the motions of nutrition do not take place, and that these motions are not in some way correlated, in part, at least, to the *energy of nerve cells*. Indeed, the convertibility of molecular and molar motions, and the analogies between special cells of the body, ought to lead us to the view that the work of the nerve cells and the work of cell territories are intimately associated, no matter what the uses are to which protoplasm may be put.

In fine, conclusions may be reached, that it is not quite correct to speak of *trophic nerves*, while it is more correct to speak of *trophic nerve cells*; that the trophic nerve cells are not all found in the gray matter of the anterior horns of the cord, but that some of the trophic nerve cells are found in the ganglia of the sympathetic. In a word, the nerve cells of the cord and the nerve cells of the sympathetic ganglia coöperate, as the cases above noted indicate, in the work of nutrition. A great many cases might be brought forward whose evidence would tend to the same conclusion. But I have already written enough to direct attention to a subject of capital importance—*and that is, the* general *coördinate and inter-dependent work of all the special cells of the body*. And I may only add, that it would take up too much time and space at present to write anything on the trophic relations of the nerve cells of the brain.

Hospital Reports.

UNIVERSITY HOSPITAL.

CLINIC OF LOUIS A. DUHRING, M.D.,
Professor of Dermatology.

Reported by Louis J. Lautenbach, M.D.

TINEA TONSURANS; SYPHILITIC GUMMA; PAPULO-SQUAMOUS SYPHILODERM; VESICO-PAPULAR ECZEMA.

Tinea Tonsurans.

This little boy has been brought to the clinic by one of the students. He comes from a neighboring town, with a disease of the scalp. The first thing that we notice is that his hair has been clipped. He is about eight years old, fairly nourished, and has light hair; he is spare and has the general appearance of a strumous disposition. He probably cares little for meats, or fats of any kind; he says that he never eats fatty food.

Examining the disease, we observe that it occupies the greater part of the scalp, in the form of a good deal of scaling, which has been plastered down by ointments; in addition, we see signs of the disease in the form of irregularly rounded patches, which are somewhat bald. Over the occipital region we have the outline of quite large patches, which have coalesced. The disease, from its appearance, has probably lasted for six weeks or longer. He says it started three months ago. Looking more carefully, we see that the hairs are partially destroyed on the patches. In addition to the patches being bald, the orifices of the follicles are puckered, the skin looking like that of a plucked goose. This appearance is pathognomonic of ringworm of the scalp—tinea tonsurans.

Examining the disease more closely, we see a number of stumpy hairs, which can be easily plucked out. Placing these hairs under the microscope, we shall observe that they are thoroughly invaded by the parasite. The patches of baldness are more or less irregular in outline, and in the parietal region we observe the hairs thoroughly "nibbled off" by the parasite.

The diseases with which we are likely to confound it are seborrhœa and squamous eczema. Considering the partial baldness of the patches, the stumpy, loose hairs, and the presence of the parasite, there is no difficulty in diagnosing the case from eczema. From seborrhœa it can be diagnosed by the fact that the hairs are nibbled off, and destroyed, while in seborrhœa atrophy occurs. Again, in seborrhœa we have simple epithelial and fatty degenerated scales; here we have not only the scales, but also the hairs invaded by the parasite. The diagnostic aid which the microscope gives us is often of great importance, and no one can work in this branch of medicine without its valuable assistance.

The disease is common in children's asylums, and it is here that the worst cases are seen. Once having found its entrance, if not energetically treated, it will rapidly spread, until perhaps 20 or 40 per cent. of the inmates have the disease. The treatment in such cases is difficult.

In all cases there are two lines of treatment to be observed: depilation, or the extraction of the hairs, and the use of a parasiticide; being careful, however, not to use too strong ointments or solutions, lest you cause undue inflammation. The disease is treated somewhat differently, according as it occurs on small or large areas of surface, in the latter case being more difficult to cure.

As parasiticides, the sulphur preparations are all valuable, in the form either of ointments or solutions. In this case we cannot do better than order sulphurous acid. Before applying this, we will direct the scalp to be cleaned with warm water and soft soap twice a day, after which the acid is to be used by dabbing it on with a soft rag, it being diluted at first with two or four parts of water, increasing the strength until it is used pure. If the skin, during our treatment, becomes dry, we may combine with other treat-

ment the use of cosmoline. Besides this, depilation must be practiced, the loose hairs being removed by the forceps.

Another remedy which is sometimes used is corrosive sublimate; it being employed of the strength of from one to five grains to the ounce of water or alcohol. It is, however, liable to be absorbed and to produce constitutional symptoms, especially if applied to large surfaces. Such cases have been reported, and one case where the use of a ten-grain solution was followed by death. I must say, however, that I have never seen any cases of this kind.

The disease is liable to relapse, and even when it appears to be perfectly cured it is best to keep on for several weeks with a mild parasiticide. To illustrate the liability to relapse, I need only mention that a similar case to the one before us was brought to me a few years ago, which three or four times I thought entirely well, and yet each time but the last, when he was perfectly cured, he was brought back to me with a return of the disease. This shows that you should not pronounce such a case well until a month or two after the entire disappearance of the disease.

There is no danger of the adult contracting tinea tonsurans; but there is great danger of children contracting it. Male adults are, of course, liable to contract tinea sycosis, which, as you know, is due to the same fungus—the tricophyton.

Syphilitic Gumma.

This colored man, aged 25 years, comes with the history that he has been under treatment for syphilitic disease of the skin, and that he recovered, and that he now has a tumor the size of a half walnut situated over the upper part of the sternum. The tumor is slightly red, illy defined in outline, and has a fluctuating feel. If we ask him how long he has had it he will probably say that it has existed two or three months; the latter period he says is correct.

We have here a typical syphilitic gumma, in which the process of breaking down is now occurring. He says it has been painful, but that it is not now so, unless pressed upon.

The only disease that we are likely to confound this with is simple abscess. It is quite common to find gummata in this situation. If he is put under treatment it may either be absorbed or it may rupture; it is difficult to say which, but I am inclined to think, nevertheless, that it will open.

We will put him on potassium iodide, ten grains, and gradually increase to twenty grains, three times a day. In three or four weeks we will put him on potassium iodide, five grains, and the bin-iodide of mercury, one-sixteenth of a grain. This preparation of mercury is, I think, more satisfactory than corrosive sublimate; as a rule it agrees better with the patient.

Papulo-Squamous Syphiloderm.

This man, aged thirty, comes to us with a disease of the skin which has existed six weeks, and for which he has been under no treatment. Flat patches and papules slightly scaly occupy the forehead and face, the lower extremities and the forearms symmetrically, the scalp, and the back of the neck. The disease invaded all parts of the body at the same time, all within a week, and has been getting worse steadily.

In endeavoring to make a diagnosis we naturally think of two diseases, viz: psoriasis and the papulo-squamous syphiloderm. He has never had any disease of the skin before, nor has he, he states, ever had any venereal disease.

If a syphilitic eruption, it might have come on at any time after the second or third month subsequent to the chancre or initial lesion, but it usually comes on much later. The glands now are not involved. He has, however, he says, sore throat, which came on shortly before the appearance of the eruption.

Here, on the leg, we see the characteristic, syphilitic moist papule. It is sharply defined, has a glazed surface, with a central depression marked by considerable induration; it gives the diagnosis at once. Now we look for infiltration, because in the syphilitic papule there is more infiltration than in papular psoriasis. On the forearm we also see flat papules, with a tendency to break down in the centre.

We have here, then, a case where the man denies all knowledge of the primary lesion, and yet it is surely a case of papulo squamous syphilis. To distinguish this from psoriasis, we have the fact that the infiltration is here more marked; the papule is more circumscribed and is more papular; and there is a tendency to depression in the centre, which shows the destructive metamorphosis. The lesions, indeed, are often difficult to diagnose from psoriasis. The man should be told of his disease, and what can be done for him in the way of treatment, and he should also be informed of the probable effects of the disease if not properly treated.

Vesico-Papular Eczema.

This young man was sent here from a neighboring town, with a history of a chronic disease of the skin, which, when first seen, was diagnosed as chronic eczema. It occupied the thighs, legs, feet, back, forearms and hands. As you see, he is pale and anæmic. To-day all the lesions are so improved that the former disease is scarcely to be recognized. On the back, however, we observe broken down vesicles in the form of a patch. On the shoulders the disease is more marked, and in the form of vesico-papules. Accompanying the disease there is a great deal of itching. Three or four days ago various sized pustules, now scarcely to be observed, were present. The case is both an interesting and a serious one. The disease first appeared three years ago, in the same form, on the arms. Some weeks afterward the disease repeated itself on the hands, since which time it has been getting "better and worse." For the last six months it has been getting steadily worse, and last month it was very bad, the itching being intense, not allowing him to sleep.

Coming now to treatment: At first we used the "liquor carbonis detergens," a solution of coal tar in alcohol, used in the strength of a ℥j to ℥ij of water. This was applied to relieve the itching. After ablution with this, he was anointed with oxide of zinc and petroleum ointment, equal parts. Internally he took tr. ferri

chlor. gtt. x, and quinia sulph. gr. ij, three times a day. Later, as he was not much better, he was ordered ung. picis et ung. petrolei, equal parts. The next day, as he was markedly worse, it seemed evident that the ointment did not suit him, when he returned to the first line of treatment, and he has since improved considerably. In order to procure sleep, we have been using chloral gr. xv, et potass. brom. gr. xx.

Medical Societies.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated meeting, January 5th, 1882. The President, Dr. E. L. Duer, in the chair.

Dr. Wm. Goodell reported the following case of

Extra-uterine Fœtation.

Mrs. B. C., aged thirty, had been married two years without conceiving, but on March 19th her catamenia ceased, and she deemed herself pregnant. She now began to suffer very much from nausea and from pelvic pains, for which her physician, Dr. W. C. Parry, of Mount Holly, New Jersey, was in attendance more or less after May 6th. On May 16th, while ironing, she was suddenly taken with a violent colicky pain in her right groin, accompanied by a vaginal flow of blood and by collapse. These colics lasted off and on up to July 15th, when she felt relieved. Dr. Parry had meantime discovered a pelvic tumor on the right side of the womb, and had diagnosticated extra-uterine fœtation. But from September 5th to 13th she had great bearing down pains, like those of labor, attended by some hemorrhage. The cervical canal dilated sufficiently to admit the finger, a miscarriage seemed imminent, but nothing was thrown off. This threw the physician off his track, and he renounced the idea of extra-uterine fœtation for that of natural pregnancy. She had felt fœtal movements, but from this time the child was still, and milk appeared in the breasts.

Her health now began unaccountably to fail, she lost flesh and strength, and became bed ridden. During the first week of last November she had another hemorrhage, with labor-like pains, and the cervical canal and os-externum again dilated during the disturbance. From this time she began to fail very rapidly, having chills, a high temperature, a frequent pulse, and quick emaciation. On November 15th I was called in to see her. On account of the excessive tenderness of the parts, ether was given. An irregular tumor occupied the abdomen, but smaller than the uterine globe at eight months' gestation: neither fœtal limbs nor the fœtal outline could be felt, nor could the presence of any fluid be made out. The cervix uteri was in a natural position, quite hard, and with a small os-externum. The sound passed in five inches, and to the left. No fœtal sounds or uterine murmur could be detected. My diagnosis was a guarded one, but leaned to an extra uterine gestation.

On November 24th, aided by Dr. B. F. Baer, of Philadelphia, and Drs. W. C. Parry, A. E. Budd and R. E. Brown, of Mt. Holly, I performed the operation of laparotomy. As soon as the peritoneum was cut open an adventitious cyst was exposed. I perforated it with a probe and enlarged the opening with a uterine dilator. Finding that the placenta covered the whole lower three-fourths of the sac, I prolonged the opening upward and removed the fœtus. It was macerated and had been dead some time, as the flesh over the ribs was stripped off during the process of extraction. The placenta was now very slowly and carefully stripped off without any hemorrhage; every preparation had been made to meet one. Not any liquor amnii was present. The sac was then thoroughly cleansed with a carbolated solution, and every antiseptic precaution taken. The opening in the sac was stitched to that of the abdomen; a glass drainage tube put in and the wound dressed with salicylated cotton. Up to December 9th, everything went well; the wound united perfectly, the stitches were taken out, the temperature had fallen, and the drainage tube was about to be removed, when, near midnight, she very unaccountably went into convulsions; these recurred and she died comatose on the morning of the 12th. Albumen was found in the urine, and at an autopsy, the kidneys were found to be diseased. The fœtal sac had become obliterated, and no relation whatever could be discovered between the condition of extra-uterine fœtation and that of the kidneys which carried her off: the latter seemed to be an accident, and in nowise related to the former. From the history of this case, there is no question in my mind that the operation of laparotomy for extra-uterine fœtation must be far more successful after the death of the child. For when the child is living it would, on account of the inevitable hemorrhage, be unjustifiable to remove the placenta; and the presence of so large a mass, which must slough off and putrefy, will seriously compromise the life of the woman. But when the child has been dead for some time, the placenta can be safely peeled off, and the sac be wholly emptied, as in my case.

Dr. Goodell also reported

A Successful Case of Hysterectomy.

The patient, a mulatto of thirty-five, had cystic degeneration of each ovary. The pelvic and intestinal adhesions were of the most formidable character, making in themselves a long and a bloody operation. But in addition to these complications, each ovary was so incorporated with the womb that he was obliged to remove that organ. This he did by dissecting off the bladder, by applying the wire-clamp at a point midway between the os externum and the os internum, and by transfixing the stump with two pins. Strange as it may seem, on the fourth and fifth days quite a smart menstrual flux, or rather a metrostaxis, took place from this small cervical fragment. The clamp fell off on the fourteenth day, leaving a very large and deep funnel-shaped opening, which is now rapidly filling up. It is now three weeks since the operation and the patient is convalescent. He stated that ovarian tumors are rare in the colored race; this being the second case only which he had seen. On the other hand, fibroids of the womb and fibro cystic

tumors are more common with them than with the white race.

Dr. B. F. Baer exhibited a

Monocyst, probably of the Ovary, but which contained Limpid Fluid.

M. J. T., aged forty; single; catamenia regular. In October, 1880, she discovered an abdominal tumor in the centre of the hypogastrium. She has been growing thin in flesh with the growth of the tumor. It apparently has varied in the degree of tension, being sometimes more flaccid than at others. Physical examination revealed a cyst of the abdomen, not very tense, extending one handbreath above the navel; the coronal resonance was very marked; dullness on percussion was also marked, and there was perfect fluctuation throughout the tumor. The womb was movable, flexed to the right, and lay behind the tumor. The sound passed three inches.

From the flaccidity of the cyst, I was at first inclined to believe it to be a cyst of the broad ligament; but the rapid growth of the tumor, and the quick emaciation of the patient pointed rather to an ovarian cyst.

On December 31st, 1881, the tumor was removed by Prof. Wm. Goodell. It was found to occupy a position to the left of the uterus, and was at first thought to be a cyst of the broad ligament, for the following reasons: It was a thin-walled monocyst, and contained a perfectly limpid fluid. The fallopian tube was stretched over the surface of the tumor and elongated; the fimbriæ were spread out on the wall of the cyst. But after a very careful search the ovary could not be found. In a cyst of the par-ovarium the ovary usually occupies a position on the side of the tumor, more or less closely attached to it by a mesovarium. After the pedicle had been ligated, and the tumor cut away, another careful search was made for the ovary, both in the pelvis and on the cyst, but it was not found. The right ovary was found in the normal position and was healthy. The only portion of the cyst-wall which in any way resembles the remains of a degenerated ovary, is a dense white substance corresponding in position to that which would probably be occupied by the ovary; but this forms part of the cyst wall, as the tunica albuginea does in ovarian cystic disease, and there is no sign of an attachment by a mesovarium.

The interest in this specimen hinges on the organ from which it was developed, if it could be proven that it originated in the parovarium, then it is of no special interest, because the arrangement of the external and middle coats allows them to be readily separated from one another, and the fallopian tube is related to the cyst wall in the manner described by Dr. Bantock as peculiar to parovarian cysts; the fluid furnished by it also corresponds to that usually found in such a cyst. But if it is a monocyst of the ovary it then becomes of special interest, for it is denied by several recent writers (Bantock and Tait, for instance), that monocystic tumors ever occur in the ovary, but that when such a cyst is found it is always of parovarian origin. Now that seems to be too sweeping a statement, for many eminent authors, among them Wells, Peaslee, and Atlee, speak of having met with unilocular ovarian cysts, and I can recall a case of a large monocyst removed by Dr. Goodell from a young lady of twenty years, in which the history, the relative position of the fallopian tube to the cyst wall, the close adherence of the different coats to one another, the albuminous fluid, rich in cells, and the absence of the ovary, pointed pretty clearly to ovarian disease rather than to parovarian.

I also present another specimen, which proves beyond a doubt that a monocyst may occur, at least while the cyst is small. This specimen was removed by Dr. Goodell from a lady, twenty-two years of age. It presents a single cyst in each ovary, and in addition a cyst in the broad ligament of one side.

Again, if the specimen first exhibited originated in the ovary, it presented an unusual feature in the character of its fluid, which was limpid and devoid of cells. If it did not spring from the ovary, why could not that organ be found? It could hardly be congenitally absent, when all the organs in its neighborhood, fallopian tube, broad ligament and parovarium, were present.

Dr. Goodell did not consider this cyst one of the ovary, simply because the corresponding ovary could not be found, for one cannot make a prolonged search at such a time. Besides, he had never seen such a clear fluid from an ovarian cyst. Again, another diagnostic point of a broad ligament cyst is the alternations of tenseness and flaccidity. So this cyst was sometimes quite tense, and at others so relaxed as to make it quite difficult to define its outlines. An ovarian cyst, on the contrary, is always tense, even if it has been recently tapped but refilling. Further, the peritoneal and other layers of the wall of an ovarian cyst are so firmly matted together by the cicatrices made by the escape of Graafian follicles that they cannot be easily separated. In this specimen the layers are, like those of a parovarian cyst, very easily torn apart. He himself had no doubt that the cyst is one of the parovarium.

Dr. T. M. Drysdale believed that a thorough search of the cyst might disclose the presence of the ovary, as he had, in several cases of tumor of the broad ligament, discovered the missing ovary spread over and incorporated in the cyst wall. He also considered the limpid fluid, free from cells, an incontrovertible diagnostic point.

Juvenile Alcoholism.

A few days ago a young girl of fourteen died in the slums of this city, under peculiar circumstances. From her earliest childhood she had been accustomed to the free use of the poisonous whisky found in that neighborhood, and became a confirmed drunkard before her twelfth year. One evening lately she attended a ball in the house of a neighbor, and returned home about one in the morning, very much intoxicated. The next morning she was seized with pain in the stomach, vomiting, headache and fever. She grew gradually worse for three or four days, and finally died. A suspicion of poison in the whisky caused the Coroner to make a careful investigation, the result of which was a verdict of "Death from Chronic Alcoholism," in a girl only fourteen years old.

Editorial Department.

Periscope.

The Causes of the Reduplication of Heart Sounds.

In an article on this subject in the *Medical Times and Gazette*, Dr. E. Sansom says:—

Physiological reduplication at the end of inspiration is accounted for by the fact that the capacity of the pulmonic system being increased, the obstructive burden upon the right ventricle is lessened—consequently the systole of the latter is shortened. The lessening of the duration of the systole of the right ventricle implies anticipation of the diastolic closure of the pulmonary semilunar valves; so there is a reduplicate second sound, the primary element being pulmonic. In pathological reduplication the origin may be in either the right or the left ventricle. If from any cause the systole of one of the ventricles be protracted, the diastolic closure of the valves of its great vessels of exit will be delayed also, and so the second sound will be double.

Guttmann supports the view of non-simultaneous closure of the aortic and pulmonary valves, without giving reasons for the proximate cause. He says, however, that it is not unreasonable to explain it by a change in a single set of the semilunar valves causing their tension to take place in two distinct movements. This hypothesis appears to me impossible to accept: such change would surely be likely to produce murmur rather than reduplication. But Guttmann says that reduplication of the second sound in mitral stenosis is difficult to account for satisfactorily, and in this I quite agree with him. He adds, "The broken diastolic sound is (so far as I have observed) certainly not loudest over the large vessels, but at the lower part of the sternum and near the apex of the heart, and is further absent in the more marked cases of mitral contraction, precisely in the cases in which the conditions most favorable to the postponement of the closure of the pulmonary valve are present in their highest degree." Reduplication, however, does not occur in mitral regurgitation, where the conditions of relative blood pressure are profoundly altered. Guttmann considers it probable that the reduplication may arise at the narrowed mitral orifice itself, that it may be a component part of a presystolic (or, as he terms it, diastolic) murmur, and adds that it has been conjectured that the first element of the reduplication is the diastolic pulmonary sound, and the second is produced, toward the end of diastole, by the contraction of the hypertrophied left auricle. In fact, the hypothesis reverts to the last I have mentioned as probably explaining some cases of reduplication of the first sound.

I consider, then, that there is a theory of auricular causation of reduplication of the second sound which is well worth considering, and that we have before us as plausible explanations of the phenomenon—

(*a*) That it is due to non-simultaneous closure of the semilunar valves in the aorta and the pulmonary artery respectively.

(*b*) That it is the effect of a sudden tension of the mitral curtains after the normal second sound.

Investigations into the Alleged Germ Origin of Malarial Fevers.

It is well known to our readers that various observers have claimed to have discovered the minute organisms which give rise to malarial fevers. Chief among these of late have been Klebs, and Tommasi-Crudeli. Their experiments have been closely followed, and an independent series of investigations made by Dr. George Sternberg, surgeon U. S. A., while at New Orleans. His report is in Supplement No. 14 to the *National Board of Health Bulletin*, accompanied by photographs and charts, and his results are so interesting that we quote his conclusions in detail:—

A great number of minute algæ, including bacteria of various forms, are found upon the surface of swamp-mud in the vicinity of New Orleans, and also in the gutters within the city limits.

Many of those forms may be successfully cultivated in fish gelatine solution (method of Klebs), and this fluid, previously innocuous, acquires pathogenic properties as the result of inoculation with these organisms.

It is evident that the pathogenic properties acquired by gelatine solution and other organic liquids, after inoculation with bacterial organisms, is due, directly, or indirectly, to the presence of these bacteria, for, if they are excluded, such fluids may be kept indefinitely without undergoing change, and are innocuous when injected beneath the skin of a rabbit.

Some of the organisms found in swamp-mud, in gutter-water, and in human saliva are capable of multiplying within the body of a living rabbit, and the fluids and organs containing them (blood, serum from cellular tissue, spleen, etc.), possess virulent properties. In other words, an infectious disease is produced which may be transmitted from animal to animal by inoculation.

Among the organisms found upon the surface of swamp mud, near New Orleans, and in the gutters within the city limits, are some which closely resemble and, perhaps, are identical with the *Bacillus malariæ* of Klebs and Tommasi-Crudeli; but there is no satisfactory evidence that these, or any other of the bacterial organisms, found in such situations, when injected beneath the skin of a rabbit, give rise to a malarial fever corresponding with the ordinary paludal fevers to which man is subject.

The evidence upon which Klebs and Tommasi-Crudeli have based their claim of the discovery of a *Bacillus malariæ* cannot be accepted as sufficient; (*a*) because in their experiments and in my own the temperature curve in the rabbits operated upon has in no case exhibited a marked and distinctive paroxysmal character; (*b*) be-

cause healthy rabbits sometimes exhibit diurnal variations of temperature (resulting apparently from changes in the external temperature), as marked as those shown in their charts; (*c*) because changes in the spleen such as they describe are not evidence of death from malarial fever, inasmuch as similar changes occur in the spleens of rabbits dead from septicæmia produced by the subcutaneous injection of human saliva; (*d*) because the presence of dark-colored pigment in the spleen cannot be taken as evidence of death from malarial fever, inasmuch as this is frequently found in the spleen of septicæmic rabbits.

While, however, the evidence upon which Klebs and Tommasi Crudeli have based their claim to a discovery is not satisfactory, and their conclusions are shown not to be well founded, there is nothing in my researches to indicate that the so-called *Bacillus malariæ*, or some other of the minute organisms associated with it, is not the active agent in the causation of malarial fevers in man. On the other hand, there are many circumstances in favor of the hypothesis that the etiology of these fevers is connected, directly or indirectly, with the presence of these organisms or their germs in the air and water of malarial localities.

The truth or falsity of this hypothesis can only be settled by extended experimental investigations, and while further experiments upon animals may lead to more definite results, it seems probable that the *experimentum crucis* must be made upon man himself.

In a disease not of a fatal character, and one for which we have a prompt and reliable remedy, it would seem that subjects for experiment might be found, especially among medical men and medical students, who have always shown themselves ready to subject themselves to inconvenience, or even to danger, in the pursuit of scientific discoveries of value to mankind.

The method of conducting such experiments which seems to me to promise the best results is the isolation and cultivation of the various organisms found in malarial localities, which may possibly be concerned in the production of malaria, a careful study of the life histories of these organisms, and an experimental investigation of the physiological action of each when taken into the stomach, or respired in a dry state, by healthy individuals. Such a study, to be of value, will necessarily involve a considerable expenditure of time and money, and requires that the experimenters shall be familiar with the most approved methods of making culture experiments, and with the technique of microscopical manipulations with high powers, improved illuminating apparatus, etc.

Another method worthy of trial in connection with this, would be to carefully study the bacterial organisms found in the mouth and alimentary canal of persons suffering from malarial fevers as compared with the common forms constantly found in the same situations in healthy individuals, with reference to the determination of the presence of unusual forms, or of an abnormal abundance of common forms, or of possible physiological varieties of these forms not possessing morphological peculiarities.

Finally, I may say that I entered upon this investigation without prejudice, but hoping that I might be able to confirm the conclusions of Klebs and Tommasi-Crudeli, whose researches were evidently prompted by a truly scientific spirit, and were conducted in accordance with strictly scientific methods. I believe that their work will prove useful in many ways to future explorers in this field, and have an abiding faith that light will eventually be shed upon this and similar problems by the persistent and intelligent application of the experimental method supported by all the resources of modern science.

Pink Eye in Horses.

Dr. C. E Page writes to the editor of the Boston *Medical and Surgical Journal* as follows:—

This disease in horses is one of the varieties of catarrhal or influenza colds, so called, prevalent in this climate among human beings, and springs from the same cause, namely, excessive, over frequent, or otherwise injudicious eating. The custom of working or exercising horses directly after eating; of feeding them directly after hard work, and before they are thoroughly rested; baiting at noon, when both these violations of a natural law are committed; these are the predisposing causes of pink eye, and of most diseases that afflict our horses. The symptoms denominated pink eye are not indicative of dangerous disease, unless feeding is kept up; but if it is, then pneumonia, which is merely an aggravation of the original disease, is very likely to result. Keep the horse quiet, dry, warm, and in a pure atmosphere. The nearer out-door air the better, and *stop his feed entirely* at the first symptom of disease, and he will speedily recover. As prevention is better than cure, horsemen will do well to heed the hint here given and keep their creatures from contracting this or any other ailment. It has been demonstrated in tens of thousands of cases, in family life, that *two meals* are not only ample for the hardest and most exhausting labors, physical or mental, but altogether best. The same thing has been fully proved in hundreds of instances with horses, and has never in a single instance failed, after a fair trial, to work the best results.

An hour's rest at noon is vastly more restoring to a tired animal, whether horse or man, than a meal of any sort, although the latter may prove more *stimulating*. The morning meal given, if possible, early enough for partial stomach digestion before the muscular and nervous systems are called into active play; the night meal offered long enough after work to ensure a rested condition of the body; a diet liberal enough but *never excessive*; this is the law and gospel of hygienic diet for either man or beast. If it be objected that these conditions cannot always be fully met in this active, work-a-day world, I reply, let us meet them as nearly as possible. We can, of course, do no more than this; but we can come nearer the mark on the two-meal system than on three. I will add, *in parenthesis*, that the nervous disorder commonly known as "pulling" will yield readily to this principle of treatment. It makes the puller healthy; he is better nourished and therefore less "nervous"; and he will

do more roading, and without excitement or profuse sweating. He is not made less ambitious by reason of reduced muscular power, but by reason of better digestion and assimilation—more *nourishment* and less *stimulation*. Horse dealers, or others, whose business or pleasure depends on the plump appearance of their animals, regardless of the size of their muscles, who must have a horse fat if he is not fleshy, for style, may have to take the chances and feed three times a day; but of this I am by no means sure. I have never tried to fatten my horses, for I long ago learned that fat is disease; but I have always found that if a horse does solid work enough he will be fairly plump if he has two sufficient meals. Muscle is the product of work and food; fat may be laid on by food alone. But for perfect health and immunity from disease, restriction of exercise must be met by restriction in diet. Horses require more food in cold than in warm weather, if performing the same labor. In case of a warm spell in winter I reduce their feed, more or less, according to circumstances. as surely as I do the amount of fuel consumed. I also adopt the same principle in my own diet. The result is, that neither my animals nor myself are ever for one moment sick.

Eucalyptus Globulus in Typhoid Fever.

Dr. Benjamin Bell, F.R.C.S.E., writes to the Edinburgh *Medical Journal*, August, 1881:—

This short note is supplementary to a former one published in this Journal (vol. xxiii, p. 680). After mentioning in that paper the remarkable benefit which, in my experience, had attended the administration of the tincture of the *Eucalyptus globulus*, or blue gum, in certain cases of what appeared to be very formidable disease of the stomach, I suggested that the same remedy might be found advantageous in cases of typhoid fever. My grounds for forming this anticipation are obvious enough. The drug possesses *antiseptic* qualities; it acts, as we have seen, beneficially upon the lining membrane of the stomach, perhaps of the duodenum. The characteristic lesion to be chiefly dreaded in typhoid fever is an irritated condition, a congestion, an inflammation, passing into ulcers or sloughs of the small follicular glands of the intestinal canal.

Ever since venturing to make the suggestion referred to, I have kept it in view, prescribing a teaspoonful of the tincture of *eucalyptus*, well diluted, at regular intervals of three or four hours, in all the cases of typhoid fever which have occurred. My distinct impression is that, as a rule, the duration of the disease has been shortened, and the tendency to diarrhœa diminished. If mixed with a large wineglassful of water, the medicine is far from disagreeable to the patient, and may be steadily administered in the intervals of nourishment without becoming irksome. By food, I mean milk and lime-water. As each dose of the tincture contains a drachm of spirits of wine, it is worthy of consideration that we are, in fact, giving a slight stimulant, not only well diluted, but possessed of a medicative property at the same time. This may, therefore, come in lieu of those other stimulants so often deemed desirable, at least in the advanced stages of the fever, while, in the intervals of the bland, milky nutriment, it will be brought into immediate contact, as an antiseptic, with the seat of threatened ulceration and sloughing.

In private practice, with a comparatively small number of cases, it would be rash to speak dogmatically as to the results of treatment; but a reliable opinion might be arrived at, were physicians connected with a large hospital which admits fever cases to employ the remedy in every *alternate* case under their care. If those patients who got the medicine were found—after its employment in a considerable number of cases—to have made more rapid recoveries with fewer bad symptoms than those from whom it was withheld, it would be reasonable and safe to draw an inference in its favor.

I may mention that my confidence in the *eucalyptus* in cases such as those formerly described continues unabated. Indeed, it has been strengthened, not only by the results in cases coming under my own observation, but also by several aggravated examples throughout the country, reported to me by the first patient to whom I administered it. He had benevolently recommended it, on his own responsibility, when he heard of persons suffering similarly to himself, before his restoration to health.

Paralysis Simulating Plumbic Wrist Drop.

The St. Louis *Medical and Surgical Journal*, for September, 1881, contains the following report of a somewhat interesting case, by Dr. C. H. Hughes of St. Louis:—

Sadie F., married, aged twenty years, came under treatment October 23d, 1879, with persistent inability to extend the hands at the wrists, both of which dropped lifeless, like those of painter's palsy. When the hands hang at her side she feels as though they were full of blood. Some years ago this lady had rheumatism, of which there are, however, no remains. In June, of 1879, she had some kind of symptoms of a form the exact nature of which could not be distinctly made out from her description, during which she was frequently delirious. I infer, however, that it was typhoid with tardy convalescence and *cachæmia*. Several irregular physicians attended her; among them a locally famous faith doctor (called, on account of his negligent *personnel*, the dirty doctor) who, though interrogated about the patient on an occasion when he had summoned me to examine and advise concerning his insane wife, could give me no information of value. About August 1st, 1879, this person found she could not move at all; but she grew gradually able to move all parts of her body, except her wrists. When first able to move about, after her fever, she weighed 77 pounds, and two months later she weighed 110 pounds. During her illness she lost much sleep and ate little, but at the beginning of this report, she ate and slept well. Her general tactile sensibility was normal, even in the fingers of the affected hand, and she told me she had always had some feeling in them. Electro-muscular excitability in the parts remaining paralyzed was, in the beginning of treatment, extinct. The temperature of the

right wrist was 98° F., that of the left, 99° F. Under the daily use of galvanism, arsenic, phosphorus, and at night only the least depressing of the bromides, with malt and a generous diet, the paralyzed parts entirely regained, in a few months, their normal power of movement, and the patient, though of small stature, soon reached her natural weight of 130 pounds; no strychnia was employed. Duchenne's observation respecting the more favorable progress of traumatic paralysis, where muscular sensibility remains after the loss of contractility under the electric current, finds confirmation in this case.

The case is noted to show the fact, not infrequent in paralysis of the extremities, viz: That notwithstanding a paralyzed limb has remained long *in statu quo*, galvanism combined with proper internal therapeutics may excite anew the arrested progress towards recovery, and that a hope of escape often remains to the hopeful and persevering.

Addison's Disease.

At a meeting of the Pathological Society of London, held Tuesday, December 20th, 1881, reported in the London *Lancet*—

Dr. Fenwick showed a specimen of Addison's Disease of the supra-renal capsules, from a case without bronzing of the skin. The man was recently in the London Hospital, under the care of Dr. S. Fenwick. He was a laborer who had had fair health. About four months previously he caught cold; a month afterwards his urine became high-colored and scalding, and he was languid and suffered from vomiting. On admission he was very languid; the pulse was very feeble; there was no pigmentation of skin or the mucous membranes, and no signs of visceral disease; there was tenderness over the epigastrium. Addison's disease was diagnosed. On September 28th, on attempting to get out of bed, he fainted, and soon after died. At the autopsy the organs generally were healthy. The liver was enlarged, and the left kidney was much larger than the right. Both supra-renal capsules were enlarged, hard, and nodulated; they were translucent, and in places yellow. He had collected all the cases of Addison's disease recorded in the Pathological Transactions during the last fifteen years, and found they were thirty in all, twenty-three males and seven females. The youngest age of females at death was five, the oldest fifty-five; the youngest age of females nineteen, and the oldest fifty-five. Average duration of illness in non-bronzed cases was 4.8 months, but in bronzed cases it was 26.8 months. If patients, without bronzing of the skin, died in one-fifth of the time of the others, the greater fatality was due to the constitutional disease, and the mischief causing this must be more intense. The two non-identical effects must have two different causes, or the same cause acting upon two different parts; the former idea might be certainly excluded. He thought the constitutional changes were due to degeneration of the medullary part of the supra-renal capsule, while the pigmentation was due to a chemical change in the blood resulting from the degeneration of the cortex of the capsule. The skin was well bronzed in nineteen cases, slightly or not at all in eleven. In four out of these eleven cases only one capsule was affected, and more often the right. In the case shown to-night the disease clearly mapped out the medulla. Dr. Wilks said that Addison had known that in the early stage the bronzing was less marked, and thought that some cases died before bronzing occurred.

Smallpox, followed by Ataxy.

At a meeting of the Harveian Society of London, held November 17th, 1881, and reported in the London *Lancet*—

Dr. G. C. Henderson read the report of a case of smallpox followed by ataxy. The patient, G. A., aged thirty-six, was admitted to the St. Pancras Tent Hospital, on May 29th, 1881. His temperature, which had ranged from 100° and 102° F., rose suddenly, on May 31st, reaching in a few hours 107.8°, and he was then immersed in a bath at a temperature of 68° for fifteen minutes. His temperature was then 96°, but it rose gradually in the course of the next eighteen hours to 104.4°. The bath was repeated. No hyperpyrexia or other complication followed, but convalescence was much protracted, large bullæ having formed on the soles of both feet, leaving scales, which separated very slowly. On July 18th, when he began to get up, he suffered from numbness and tingling of the feet, legs, and hands; the knee jerk and ankle clonus, as well as the skin reflexes, were absent; and he lost his balance when his eyes were closed. After leaving the Tent Hospital he attended as an out patient at University College Hospital. He slowly gained power in his legs, but when last seen the knee-jerk was still absent. Dr. Henderson referred to similar cases recorded by others, and considered the lesions causing the patient's symptoms were probably analogous to those found in diphtheritic palsy, and other forms of paralysis noted after acute diseases. They differed from those of true locomotor ataxy in the more favorable course which they took, ending in the majority of cases in recovery. Dr. Whipham had had two cases similar to Dr. Henderson's. Neither of them was treated with the cold bath, so the suggestion that the ataxy had had anything to do with the cold bathing might be dismissed. Both patients talked in a peculiar manner. Another point to be noticed was the irritability of temper which he thought most of these patients suffered from. Dr. Broadbent thought Dr. Henderson's notion as to the origin of the paralysis was the correct one.

A Penetrating Pistol Wound of the Brain.

Dr. J. Foster Bush reports the following case in the Boston *Medical and Surgical Journal*:—

A stout German, sixteen years old, was, on June 29th, while playing with a younger companion, shot in the head, and immediately fell to the ground insensible. I saw him within ten minutes after receipt of the injury. He was lying upon a sofa, breathing heavily, with a slow pulse, the mouth drawn to the left and the left arm and

leg paralyzed. It was with difficulty that he could be roused.

Upon examination a small round wound, with inverted edges, was found in the forehead, over the centre of the right eye and an inch above the eyebrow. Blood was oozing from the wound. Without the use of force, simply by its own weight, a probe passed into the wound penetrated backward to the depth of two inches. The opening in the skin was then enlarged so as to admit the tip of the little finger, and with this a circular hole could be felt in the skull. The patient was put to bed, cloths wet in ice water applied to the head, and the wound dressed with a two and a half per cent. solution of carbolic acid.

Two hours after the receipt of the injury he became perfectly unconscious, and could not be roused. Both pupils were dilated, the right fixed, the left responding to light. Five hours after the injury his condition was about the same as when last seen, the only new symptom being vomiting. Cerebral substance in masses as large as a split pea were noticed coming away with the blood. Upon examining the opening in the skull with a probe, small particles of lead were removed. Absolute quiet and rest were enjoined; liquid diet in small quantities ordered; dry cold, in the form of an ice-cap, was applied in the place of the wet compresses; and a one per cent. solution of phenyle was used in place of the carbolic dressing.

The next day the right pupil was largely dilated and did not respond to light. He stated that he could not see out of his right eye. Ten grains of bromide of potassium were given every three hours.

On July 3d there was a sero-purulent discharge from the wound, the pulse was 100, the temperature was 102.4° F., and the pain in the head was increasing.

On July 8th sight in the right eye was perfect; the headache was slight and local. For the first time since the accident he felt hungry. There was hemiplegia, with loss of both motion and sensation, and the skin of this side was colder than the other. Upon tickling the sole of the left foot the right leg would be drawn up. He also experienced spasmodic pain from left hip to the heel, and was able to move the leg for the first time since the receipt of the injury.

From this time on he gained in strength constantly, relished his food, and if he kept quiet, felt nicely. It was forty-one days from the time of the accident before he could move his arm, and up to this time he could not sit up in bed without experiencing nausea, or feeling as if "something was rolling about in his head."

It is now seven months since the receipt of injury and the patient has perfect use of both the arm and the leg of the side which was affected. He can walk without any support, and has complete control of the muscles of the arm and hand.

Although the symptoms and progress have been favorable, and there are now no alarming circumstances, I do not feel that we can give a favorable prognosis, for although wounds in the anterior and upper portion of the hemispheres are least dangerous, yet the risk of continued cerebral symptoms, epilepsy, abscess of the brain, and death from acute cerebral disease are great.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Transactions of the State Medical Society of Wisconsin, for 1881. This volume contains much that is interesting; notably an address on the "Influence of Mind upon the Body," by the president, Ira Manley, M.D.

——The *Half-yearly Compendium of Medical Science*, edited by D. G. Brinton, M.D., Part XXIX, for January, 1882, has been issued. It is a complete and thorough condensation of the progress of the last six months in medical science.

——"Anæsthetics, Medico-legally Considered," is the title of an address delivered before the Medico-legal Society of New York, Dec. 7th, 1881, by J. G. Johnson, M.D., of Brooklyn, and comes to us in the form of a reprint from the Bulletin of the Society.

BOOK NOTICES.

A Treatise on Aural Surgery. By H. McNaughton Jones, M.D., F.R.C.S.I. and Edin., Surgeon Cork Ophthalmic and Aural Hospital, etc. Second edition, revised and enlarged. pp.344. J. & A. Churchill, London. 1881.

The author of the book before us is so well known, not only in Great Britain and the continent, but also in the United States, that the second edition of his treatise on Aural Surgery comes with an established reputation for practical worth that commends the same to all interested in this special department. With a Sir William Wilde at the head of a list of Ireland's surgeons, the Emerald Isle has just reason to be proud of having done her full share towards the advancement of general and special surgery. Although Wilde's glorious work on the Ear is now over a quarter of a century old, it bears the full light of to-day's criticism, and Jones' work gives, in a concise and practical form, with his own, the most modern views on otology. The entire book is rearranged. The author has added several chapters, and fully maintained the essentially practical character of the work. Dr. Jones acknowledges many useful hints and suggestions from such authorities as Weber-Liel, of Berlin, and Löwenberg of Paris. A series of translations by the author, from Dr. Löwenberg's work on "Adenoid Tumors of the Naso-Pharynx," have been condensed and added, in the form of a special chapter. Dr. Morrell Mackenzie contributes additions to the portions of the

work bearing on the throat, in the chapters on rhinoscopy, enlarged tonsils, and post-nasal catarrh. Dr. L. Turnbull is quoted on tinnitus aurium, the education of the deaf mute, and the influence of sea-bathing in causing deafness. Dr. Ringrose Atkins has rewritten the chapter on othæmatomata. Throughout the entire work valuable practical hints are to be gained from the author's experience, derived from the examination and treatment of upward of 5000 aural patients. Twenty chapters are in turn introduced by a carefully arranged table of contents, and closed by an appendix wherein is considered several important therapeutic hints, a list of authorities quoted, and a first-class index.

Suppression of Urine. Clinical Descriptions and Analysis of Symptoms, by E. P. Fowler, M.D. New York: William Wood & Co. 1881.

This is a small book (only eighty-three pages), that no progressive physician can afford to do without. Dr. Fowler commences by giving the report of one remarkable case of complete anuria (in which the suppression was absolute for ten days and two hours), occurring in his own practice, and in which a most interesting autopsy was added, to make clear a most remarkable series of symptoms. This case is followed by tables of ninety-three cases of anuria, collected from the medical literature of the last one hundred years, and these, in turn, are followed by statistics respecting anuria and associated symptoms. Diseases of the kidney are frightfully prevalent, and seem to be rapidly on the increase. Scarcely a day passes that we do not hear of some friend or some public man dying from kidney disease. Unfortunately, our knowledge of the therapeutics of renal diseases has not increased in the same proportion that our familiarity with their pathology has. Therefore, it behooves every physician to turn a good share of his attention in this direction. While this little book does not materially add anything to the therapeutics of anuria, yet by directing medical energy into that channel, it will be productive of good fruit.

Frozen Sections of a Child. By Thomas Dwight, M.D., Instructor in Topographical Anatomy and Histology in Harvard University, etc., with fifteen drawings from nature, by H. P. Quincy, M.D. New York: William Wood & Co., 1881.

This book possesses the merit of originality and well executed drawings. The drawings are life-size, and the sections were made from a child three years of age. The body was first frozen so hard that the operator was unable to tell whether he was sawing through muscle or bone. The sections were then made and preserved in cold alcohol. Dr. Dwight believes that this method of preparing specimens for anatomical teaching is destined to become universal. His work has been executed admirably, but the book is not calculated to be of much service to the busy general practitioner, while to the anatomist, or to one who desires to become familiar with everything that is new, it will prove very acceptable.

Lectures on Electricity (Dynamic and Franklinic) in its relations to Medicine and Surgery. By A. D. Rockwell, A.M., M.D., Electro-Therapeutist to the New York State Women's Hospital, etc. New York: William Wood & Co. 1881.

A series of lectures originally published in a medical journal, and now brought together in book form. It is really a supplementary brochure to the larger work on electricity by Beard & Rockwell. This is the second edition, and contains some valuable improvements and additions to the first; prominently among them may be noted a description of the "galvanic accumulator" for storing electricity for surgical uses, and of the "induction balance," which was used in the case of President Garfield, to endeavor to locate the bullet, with what signal failure we are all well acquainted. To those who possess the larger treatise, this small book of one hundred and twenty pages will form a suitable companion.

A Study of the Tumors of the Bladder. By Alexander W. Stein, M.D., Surgeon to the Charity Hospital, etc. New York: William Wood & Co. 1881.

This is an interesting subject, about which comparatively little has been written. Dr. Stein had four interesting cases under his care, which caused him to take an interest in the subject, and, as a result, this monograph was written. It is in reality a compilation from the periodical literature of the day, well arranged and illustrated. He divides tumors of the bladder into benign and malignant growths. Among the former are included papillomata, myxomata, fibromata, and myomata. Under the latter, carcinomata, and sarcomata. He has collected and classified a very large number of cases, which tend to make this a valuable monograph.

A Treatise on Diseases of the Eye. By Henry D Noyes, A.M., M.D., Professor of Ophthalmology and Otology in Bellevue Hospital Medical College, etc., etc. New York: William Wood & Co., 1881.

This is the December number of Wood's Library, already so well known as to require merely an announcement.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

PREPARATION FOR MEDICAL STUDIES.

We have heretofore referred, in a somewhat too brief manner, to the new department in the University of Pennsylvania, which has been created with the special object of preparing young men for the study of medicine.

In the comments which have appeared in the medical press on this subject, it appears to us that the one most important feature of the case has been not fully enough dwelt upon. To lengthen the period of medical studies out to the European standard is, as yet, absolutely impossible. Yet our schools attempt to cover nearly the same ground that the foreign institutions do. The inevitable conclusion is, then, that when we attempt to crowd a full four years' course into two, or at most, three winters, we, by that very fact, institute a process of cramming which is bad for the individual student, and worse still for the prospective doctor, because it introduces him to and carries him through his period of preparation in the capacity of a mere receptive machine, allowing no, or next to no, time for proper culture of habits of observation, or his reasoning and comparing faculties. Bad as this is, it has probably been unavoidable. The new department of the University promises most effectually to obviate this. In fact, it is but a most rational extension of the idea expressed in the month of preliminary lectures which some of the leading medical colleges had already instituted. Practically it is adding another year to the medical course, by the manner in which it specifically fits the student for medicine, as it familiarizes him with technical terms, teaches him the use of implements of research, and opens the trails which broaden into well-trodden avenues to medical knowledge as he advances. While it affords opportunity to the regular student of a collegiate or scientific course to diverge from the ordinary curriculum, it also admits such special students as may have neither time, inclination nor means, to a special preparation, stipulating only that they shall have such preliminary general culture as would enable them to pass the examining board instituted by the county societies at the suggestion of the State Medical Society. Of these certainly the fuller course is the more desirable, on the general principle that one cannot have too much mental training, or too large a grasp of facts; but the second is a great advance on any plan hitherto devised for elevating the standard of the profession. The most cheering aspect of the move is that before the department is one session old it has shown such signs of vigor, and has been so well received, that its success is absolutely assured.

Taking the student through comparative to human anatomy; through physiological and analytical botany to study of the plants used as remedies; through general chemistry, so as to fairly ground him for medical chemistry; through physics far enough to enable him to apply laws of light, sound, etc., to the instruments he will use in after life; giving him also, if time allows, a good start in Latin, French and German, and also English literature; such a course cannot fail to fit an industrious lad for a high stand in his future profession, and one, too, which must tell

in his favor when he enters the crowded medical ranks, as a competitor for public patronage. It is to be remembered that this course is taken, not from text-books, but, so far as possible, by laboratory work, where all that is learned is apt to be retained; giving, beside, the largest stimulus to correct observation and correct judgment.

There are, so far as we can see, but two weak points in the whole plan: First, that elementary physiology has been omitted; and second, that no institution in the land is yet able to demand some such preparation before allowing students to matriculate in medicine proper. The first of these defects will doubtless be remedied during the year. The second is probably a question of longer time. But when law and theology both demand adequate preliminary tests for actual attainments and for mental training, it is hardly conceivable that our own profession will be content forever to bring up the rear. There is some comfort in the fact that Philadelphia has been the first to hit upon and to fairly grapple with a system of preliminary medical culture which promises such good results.

MILK DIET IN BRIGHT'S DISEASE.

Since we know not at present any drug that possesses therapeutic value to any marked extent in this terrible and fatal disease, and since it is daily making sad havoc among human beings, and principally among that class who, by reason of their valuable public labors, are particularly necessary to the welfare of the world; therefore, it becomes a medical question of paramount interest, that we should discover some potent method of combating this very prevalent disease. Some years since CAREL first called attention to the treatment of Bright's disease by the use of a milk diet, and since then DUNCAN, as well as many other prominent physicians, have written on this subject. We have ourselves seen some remarkable results follow this treatment, while Dr. S. WEIR MITCHELL, of our city, is now quite an enthusiast on this subject. This method of treating a formidable disease has received sufficient distinguished endorsement to recommend it seriously to our notice. We would, therefore, ask all physicians who read this article to try this method of treatment, and to furnish us with their experience, which we will publish. The milk is used thoroughly skimmed and entirely freed from butter. To procure the best results, it has been advised that the patient shall restrict himself absolutely to milk, and continue the treatment for a long time. If it disagrees with the stomach (as it will in some cases), Dr. MITCHELL advises that the patient be put to bed, and the treatment commenced with tablespoonful doses, to which lime water is added, until the stomach tolerates the milk, when from eight to ten pints daily should be taken, and absolutely nothing else. The sanction of such a distinguished physician as Dr. MITCHELL forces us to seriously consider the merits of this treatment, and we trust to receive the experience of all readers of this journal who may have cases of Bright's disease to treat.

NOTES AND COMMENTS.

Ephidrosis.

The above name has been given to a disease of an unknown nature, but characterized by profuse sweats, returning at variable intervals, usually, every year, at the same date. That distinguishes this morbid condition from the sweats attending intermittent fever, or the colliquative sweats in phthisis, or those in miliary fever. Ephidrosis is chiefly met with among sufferers from constitutional gout, among hypochondriacs, and in certain neurotic affections unattended by gout, but in which sudation seems to be the result of nervous perturbation. Several instances have been observed which may be likened to the following case described by Dr. Olivier, in 1881, in the *Arch. de Méd. Nav.* A non-commissioned officer was admitted to the Toulon hospital, having, for a month past, been suffering from profuse sweats. He had contracted intermittent fever in 1862, and since then was subject to such attacks every year. These copious sweats continued after the patient's admission; his garments and bed clothes being thoroughly saturated by the liquid thus abundantly secreted each day, from nine in the evening till midnight. The sweat was liquid, acid, then alkaline, and its temperature that of the body. The skin was turgescent, and congested,

but of normal temperature. The sweats were often preceded by a chill, and when they were over the patient slept, and only complained of fatigue. During his stay at the hospital some prurigo was noticed, also some erythematous and lichenous eruptions, attended with itching. Otherwise all the other functions were normal.

Mr. Olivier attributed this hyperhydrosis to a psychical cause. He classed it with Spring's phrenopathic variety, and believed it due to moral emotions, from which the patient often suffered. Country air, absence from care, and tonic medication, combined with hydrotherapy and antispasmodics, were found of greater benefit to the patient than all the remedies administered while under treatment at the hospital.

This case might also be considered as resulting from *larvated fever*.

Can a Threatened Attack of Diphtheria be Averted?

Dr. Alfred Sheen, Surgeon to the Cardiff Infirmary, writes to the editor of the London *Lancet* on this important subject. His question is based on this fact: He was called to see a young woman who had nursed her brother through a fatal case of diphtheria. Four days after his death she was seized with general malaise, shivering and thirst. Pulse, 144. Temp. 103.4°. She did not complain of her throat, which, on examination, presented a normal appearance. She was given twenty five grains of ipecacuanha powder at once, and one ♏ of the tincture of aconite every quarter of an hour, for the first hour, and every hour afterward. The next day her pulse was 94 and temp. 99.8°. On the next day her *throat was painful and congested*, but no patches. She was ordered:—

℞. Liq. ferri perchlor.,	f℥ iv.	
Potass. chlorate,	℥ ij.	
Glycerinæ,	f℥ ij.	
Aquæ,	f℥ vj.	M.

Sig.—f℥ ss every four hours, in water.

Two days afterward pulse was 76 and temp. 98°. Congestion gone and the girl said she was quite well. Dr. Sheen then asks: "Was this woman, when I first saw her, suffering merely from a sharp attack of febricula, brought on by fatigue, anxiety about her brother, and subsequent exposure at the funeral, or was she in the early stage of diphtheria?" He adds that, "As a rule, specific febrile diseases are not averted by treatment, but may that not be because we do not get hold of the disease early enough." (?) In view of the fatal nature of this disease, and the uncertainty surrounding its pathology and therapeutics (so great that a distinguished French lady has offered a reward of five thousand dollars to any one who may discover a preventive), this query is worthy of attention and investigation, and we will be glad to hear from our readers on the subject.

Phenic Acid; Its Antithermic and Apyretic Effects in Typhoid Fever.

Mr. Van Oye has lately finished an interesting thesis on the above subject, and these are his conclusions, as published by *Paris Médical, No.* 46:—

1. Phenic acid acts as a poison on the nervous system, and possesses, to a high degree, the faculty of reducing temperature, both in man and the higher animals.

2. Doses having no appreciable effect on the normal temperature are sufficient to reduce the febrile temperature.

3. This reduction takes place in all fevers, whether simple phlegmasias or infectious pyrexias.

4. Its effects appear a few moments after the medicine has been taken; their range is from 1° to 3° Centigrade, according to the dose given, and they continue from one to three hours.

5. Its action is probably due to the loss of caloric resulting from cutaneous hyperæmia, and the more or less abundant sweats coinciding with its production.

6. When the antipyretic effects of a dose are exhausted, a chill supervenes, all the febrile phenomena return, and the temperature suddenly rises to, or even beyond, its former degree.

7. A fresh dose will counteract this paroxysm, or prevent its return, if administered in time.

8. Doses that are sufficient to produce all the required antipyretic effects do not exercise any immediate noxious or toxic action on the patient.

9. Fifty centigrams (gr. viiss) administered *per rectum*, are in all cases sufficient at the outset. In general, the dose can be progressively increased until it reaches two grams *pro dosi* (℥ ss), and twelve grams *pro die* (℥ iij).

10. A dose of one gram (gr. xv) has, in some special cases, lowered the temperature down to 34.5°. This exaggerated reduction has, in no case, been attended with any evil results for the patient.

11. Pulmonary congestions are the danger to be feared and avoided.

12. Albuminuria, polyuria, and fatty degeneracies are the possible effects which may result from large and long continued doses.

13. The antipyretic properties of phenic acid

should be reserved to be used against hyperthermia in continuous fevers, or paroxysms in intermittent fevers.

Cliterodectomy.

Dr. George J. Engelmann contributes a very valuable and interesting paper on this subject, to the *American Practitioner* for January. He thinks the operation has fallen into undeserved disrepute, and advocates its performance in certain cases. His justification for the operation is based upon a recognition of the importance of reflex action in female suffering. He gives a complete record of one case (the only one he has ever seen), in which a lady, fifty-two years of age, was placed under his care for the following condition: She had always suffered much from headache, and was very nervous, easily flushed by worry or excitement. She has had eleven children; menstruation had always been regular, but profuse, until about six years ago, when, after eighteen months of irregularity, it ceased altogether. She complains of nervous attacks, originating sensibly in the region of the clitoris, and culminating in melancholia. All the symptoms of the attack evidence a profoundly nervous condition, and great derangement of the general health. After lasting a variable period, these symptoms would suddenly disappear, and she would have two or three weeks of comparative comfort, followed by a fresh attack, until life became a burden. Examination revealed an irritated vulva, carunculæ myrtiformes, and very much enlarged nymphæ and clitoris. He removed the carunculæ, and subsequently amputated the clitoris and nymphæ. The patient made a good recovery, and while under his care was entirely free from bad symptoms. Some months afterward, however, when she had returned home, the old attacks came back with full force, but Dr. Englemann attributes this relapse to a return to her old habit of masturbation, which, of course, the presence of the nurse had prevented. The question therefore arises, whether her nervous attacks were due to the enlarged clitoris or to masturbation. This opens up a wide field for investigation.

Forced Feeding in Phthisis.

From the London *Lancet* we note, M. Debove has lately urged the importance of the forcible feeding of phthisical patients by means of the œsophageal tube, and his favorable results have been confirmed by M. Dujardin Beaumetz. In some cases the stomach is first washed out, and then food is introduced, easily digestible—milk, eggs, pounded meat, etc. Patients are said rapidly to regain appetite, strength, and nutrition, and to lose their pyrexia, night-sweats, and vomiting. The tolerance of the stomach for food thus introduced, even in considerable quantity, is said to be remarkable, and even the most troublesome cough no longer causes vomiting. M. Dujardin-Beaumetz has employed for this purpose an œsophageal tube, one-third of an inch in diameter, and gives by it about three and one-third ounces of raw meat, four eggs, and about two quarts of milk at a time, and four and a half to six fluidounces of cod-liver oil. He prefers to feed the patient in this manner twice in the day, and has also observed under this treatment an improvement in the pulse, a diminution in the fever and in the sweating, but he has not yet observed a decrease in the pulmonary disease.

Excision of the Pylorus.

At the meeting of the Royal Medical Society of Vienna, on December 16th, Dr. Wölfler exhibited a woman upon whom Professor Billroth had performed resection of cancerous pylorus two months before. The procedure in that case differed from that of others in that the duodenum was not at once divided, but its posterior wall was first fixed to the stomach by sutures. The operation lasted an hour and a half. Microscopic examination showed that glandular cancer existed, but that no cancer elements had yet appeared in the lymphatic glands extirpated at the same time. Dr. Wölfler also showed the woman upon whom he had similarly operated eight months before. No recurrence had taken place. Her digestion is quite normal.

In view of our present powerlessness to medically treat cancer of the stomach, every successful case of surgical interference seems like a beacon giving evidence of the halcyon days ahead, when we may reasonably hope to afford relief from this terrible disease.

Akido-galvano-cautery for Epilation.

Dr. C. Heitzmann, of New York, read a paper on this subject before the American Dermatological Association, at Newport, in August last, which has been published in the January number of the St. Louis *Courier of Medicine*.

After discussing the failure of the means hitherto recommended, he comes to the con-

sideration of electrolysis, which term he does not like, since it would convey the idea of an electric action on the tissues, without thermic influence. What we use for the destruction of hairs is the galvanic current, and, as it seems, its thermic action, therefore galvano-cautery. The action being induced by a delicate needle, the work *akis* could be attached, and *akido-galvano-cautery* or *akido-cautery* would be a more correct term than *electrolysis*. The battery he used consisted of sixteen cells. At first the action of the galvanic current was very slow, due to an insufficient moistening of the sponge, which the patient held in her hand. If the sponge was kept well soaked in water, six or even five cells were sufficient to render the operation successful and almost painless.

The needle attached to the negative pole was inserted into the hair pouch, without touching the hair itself, so that the negative pole was applied to the bottom of the hair pouch, the positive, by the sponge, to the hand. A whitish discoloration around the needle, detached epidermis, a little frothing, and subsequently, a marked redness around the needle, occurred. The loosened hair was then removed (without any force) by tweezers; the root was slightly discolored, and looked as if burned through. A second insertion of the needle into the gaping pouch is advisable. A small papule or pustule follows the operation, which will heal up without leaving any scar worthy of note. Failures will occasionally occur, but Dr. Heitzmann operated upon four hundred and fifty hairs and six months afterwards only six hairs had recurred, which readily yielded to a short operation.

Inflammation of the Hair Follicles of the Nose.

The St. Louis *Courier of Med.*, says: Dr. Hardaway called the attention of the St. Louis Medico-Chirurgical Society to the inflammation of the follicles of the small hairs in the nose. They give intense pain, and there is much inflammation externally as well as within, and very frequently, after the inflammation of the hair follicles subsides, it is followed by *exfoliation* of the outer portion of the skin of the nose; in other words, the patient has a very red nose. Externally, it is generally limited to one or the other side; there is a great deal of sharp, very acute, intense pain. The cases generally continue for weeks, very frequently last several weeks, and when it subsides, there is considerable epidermic shedding—desquamation—showing the violence of the inflammation. They are cases that try the patience of the doctor and the patient both. Within the last year he has been using a treatment which has given great satisfaction. He uses Squibb's glycerole of the subacetate of lead and glycerine, one part of the first to seven of the latter. Under this treatment, the trouble disappears rapidly.

Successful Skin Grafting.

The *Paris Médical*, November 19th, 1881, reports the case of a man, thirty-seven years old, who for over six years had suffered from a varicose ulcer on the left leg. Every form of treatment had been resorted to without benefit. While in the hospital he begged of Dr. de Lamallerée to make one more effort in his behalf. The idea of skin grafting then suggested itself to the physician. The ulcer was 14 centimeters by 8. On this six grafts were applied, taken from skin off the abdomen of a young live rabbit, the hair having first been shaved off. Besides these, two other grafts of skin from the patient's forearm were also applied, and the parts were dressed antiseptically.

After eight days the dressing was removed, and it was found that the six animal grafts had fully taken; they were surrounded by healthy granulations; but the human grafts had not been successful. The dressing having been continued another eight days, inspection showed that the grafts formed a patch of healthy skin in the centre of the ulcer, 10 by 7 centimeters. After another week of antiseptic dressing, cicatrization was complete, and when the patient was again seen, two months later, he was entirely cured, and no rabbit hair had grown on the new skin.

Hypodermic Injection of Quinine.

J. B. Scriven, late civil surgeon of Lahore, writes to the London *Lancet* on this subject, and from his communication we note the following conclusions. There is no danger of abscess if proper precautions are used. He is always careful to introduce the nozzle of the syringe so that the aperture by which the quinine enters the cellular tissue shall be turned away from the skin. The result has been that he has never had a case of abscess, ulceration, sloughing, or evil effect of any kind, save a temporary inflammation of the arm requiring rest and cold lotions. It is well, from the moment of the injection, to give the limb absolute rest for a few days. He prefers the tartaric solution to the aqueous solution of the neutral sulphate, on account of its higher concentration. If the solution is free from visi-

bly insoluble particles, filtering is not resorted to. This is a valuable experience, inasmuch as the physician is apt to meet cases (particularly in puerperal fever patients) where, owing to uncontrollable vomiting and purging, this valuable drug can only be used hypodermically.

Case of Epilepsy Produced by Reflex Irritation.

The following is from the St. Louis *Courier of Medicine:* W. S., a boy aged eleven years, had been suffering from epileptic attacks for several years, which came on at different periods. The boy was rather emaciated, and of very nervous temperament. On examining the boy's penis, I found that he had phimosis, with a very small preputial opening. He told me that sometimes, when urinating, the prepuce swelled up by the urine which collected, and could not empty as fast as it came from the urethra, causing him some pain, which, however, he never told his parents. I then advised the parents to have the boy circumcised, which would materially help, if not entirely cure, this terrible disease of their son. They consented. The next day I performed the operation, having the patient under the influence of chloroform. The wound healed without trouble. From that day his nervousness grew less and less; he has had no other attacks; to-day, one year and a half after the operation, he is stout and fleshy.

Alcoholic Intoxication.

The London *Lancet* says that Lallemand, Perrin, and Duroy, have found notable quantities of alcohol in the blood of intoxicated animals. M. Grehant, in continuing these experiments, has endeavored to ascertain what proportion of alcohol in the blood is sufficient to produce and maintain symptoms of intoxication. Seven ounces of alcohol (21° strength) were given to a dog, in two doses, at an interval of half an hour. At the same time the animal was made to breathe through a flask containing absolute alcohol, to offset the influence of pulmonary exhalation. At the end of an hour, about two and a quarter ounces of blood were drawn from the femoral artery. It was found to contain about eight minims of absolute alcohol, which corresponds to one part of alcohol to 197 of blood. The animal was profoundly intoxicated.

Calabar Bean.

Every now and then an article appears in some journal about Calabar bean, and it is recommended for various diseases, notably in tetanus and epilepsy. The assistant editor of this journal wrote his graduation essay on Calabar bean, and in studying the literature of the subject, found so many cures of epilepsy reported that he was led to believe that we had almost a specific for this terrible disease. Subsequently, during an experience in a large hospital, he was afforded the desired opportunity of using the bean in a *very* large number of cases of epilepsy, and found it to be utterly worthless. It had no effect whatever, unless it may have intensified the paroxysms, since it was noticed in more than one case that a seizure for which the bean was given was more violent and lasted longer than another attack in the same person when it was not used.

Prevention of Hay Fever.

Mr. J. B. Hannay, of Cove Castle, Loch Long, N. B., writes to *Nature* that he has succeeded in finding a means for the prevention of hay fever. One thing which misled him was, that his eyes were often very much inflamed and pained during an attack, and he often tried remedies for his eyes when they were only affected in sympathy with his nose. He found that the only thing required was to prevent the entrance of the pollen grains into the nose. For this purpose he uses a piece of brass or steel ribbon, bent double, and having only sufficient spring to close the nostrils without undue pressure. When going among hay a further precaution should be taken, viz., plugging the lachrymal ducts. He used for this purpose dumbbell shaped pieces of glass, which were easily slipped into the ducts, and could be removed when wanted.

Special Reports.

No. II.—ON THE EXAMINATION OF DEAD BODIES IN SUPPOSED CRIMINAL CASES.

BY GEO. F. SOUWERS, M.D.

(*Concluded from page* 81.)

In examining the body, the first points to be noticed are the approximate height, weight, and general physical condition of the subject; care should be exercised in this latter respect, from the fact that a defence might turn on the physical state of the individual, as in cases where it is charged that the deceased was maltreated or starved to death. Before touching the body, note should be made of the exact locality, position and attitude of the corpse; the situation it occupies relative to other articles (such as pieces of furniture) in the room; or, if found on the highway, or in the fields, the distance and direction from certain well-defined objects or near-by landmarks. Supposing these suggestions to have been observed, we will proceed to the next step, and this should be the observation of the degree of rigor mortis present; whether the limbs can

readily be flexed and extended, or whether they resist attempts at motion; it should be remembered that a limb in a state of rigor mortis can more readily be extended if it be first flexed or moved in the direction in which it normally acted during life. While ascertaining the condition we have just spoken of, the temperature of the body should be noticed, as this may throw some light on the length of time that has elapsed since the cessation of life, a question that might come up for discussion, where two persons being found dead at once, the heirs of either are to succeed to the whole of an estate upon the death of one, as where a will has been made, that if A die before B, the estate shall descend to A's heirs; but if B die before A, then to those of B, as in the case of a husband and wife having no children. Under these circumstances, if A's body were found to be entirely cold, whereas B s still retained its animal warmth (being of course exposed to the same circumstances and temperatures), the supposition naturally would be that A died first, and consequently, his heirs would be entitled to the inheritance. The next step in the examination is to ascertain the presence, number, seat, direction, depth and appearance of all wounds and scratches on the body, beginning from the hair and going down; any material found clenched in the fingers of the deceased should be retained by the examiner for future reference; this includes all such articles as hair, pieces of cloth, grasses, weeds, etc.; it may seem straining a point to suggest the retention of weeds, etc., but there are a number of instances on record where these, when submitted to the microscope, have proved that the deceased did not meet his death at the place in which the body was discovered. In case of lichens being found, it would be well for the physician, after finishing the principal examination, to seek to discover similar bodies in the locality in which the body is found, these to be used for purposes of comparison. [In the observation of wounds, it is of primary importance that it be noticed whether the edges gape open and are everted, or whether the lips are more or less closely approximated; a wound that gapes must have been made before or very shortly after death, where the skin seems simply to have permitted the passage of a knife, or sharp instrument, without retracting from before it, it is good evidence that the wound was inflicted after and not before death, although, as Taylor remarks, a lateral motion given to the hand or the instrument in making a cut or stab, may be the cause of a certain amount of gaping. That wounds made before and after death should resemble each other more or less closely in respect to the degree of gaping present, it is necessary that they should have been made while the *animal heat* still remained in the body. Taylor, in some experiments on this point, made on amputated limbs, arrived at these conclusions in regard to the time at which retraction and the other symptoms of section during life ceased to appear. We place them in a tabulated form:—

Incision made two minutes after amputation, through skin etc., down to the deep seated fascia of the leg (calf).	Skin retracted so as to permit extrusion of adipose substance, on account of which protrusion there was but little blood effused, owing to mechanical pressure. The wound after 24 hours presented red, bloody and everted edges; skin not swollen, but slightly flaccid; coagula slight and at bottom of wound being readily broken up by the finger.
Ten minutes after amputation, similar incision on outer side of leg, down through the peronei and flexor longus pollicis.	Elasticity of skin lost; edges but very slightly everted; but little blood lost. In 24 hours afterwards the edges of the incision were pale and collapsed, presenting none of the characters of a wound inflicted during life: while there were a few coagula at the bottom of the wound, yet they were decidedly less in number than in the preceding instance.
Two to three hours after.	A little blood effused, but no coagula formed.
Twelve or fourteen hours after death.	No resemblance between wounds made during life and after the lapse of this period.
A wound with swollen and everted edges.	A wound inflicted before death.
A wound inflicted before death presents:	*A wound inflicted after death presents:*
1. Eversion of the edges, owing to the elasticity of the skin.	1. Edges not everted, but close.
2. Abundant hemorrhage, often of arterial character, with a general infiltration of the surrounding connective tissue.	2. Hemorrhage or bleeding exclusively venous; absence of copious hemorrhage, there being about the divided arteries no marks of blood, as

	there is where hemorrhage takes place during life.
3. The presence of coagula. (If there has been no bleeding of any account then these two latter signs may be wanting.)	3. No coagula and no infiltration of blood into the connective tissue.
4. The edges or lips of the wound are more or less resistant to pressure lightly applied.	4. Edges of the wound soft, yielding, and destitute of elasticity.

The above appearances should all be carefully noticed and note made at once of the appearance, location, measurements, condition, and direction of the wound or wounds; the exact time at which these observations are made should be noted, and if possible, comparison should be made with the time piece carried by the deceased; the need of this precaution may not seem clear to many, but we will explain. It is not an uncommon event to find a watch carried by a person who has met a violent death, especially where there has been a severe struggle, in which it has been subject to more or less rough usage, to be stopped; we have found that in ten minutes a dead body ceases to respond to certain tests to which a living body would, one of these being the retraction of the skin; now, if a person, being suspected of a criminal attack upon the deceased, attempted to prove an alibi, it would only be necessary, in the first place, for him to show where he was during the interim between the stoppage of deceased's watch and that of the physician; or, secondly, if. for purposes of experiment, a doctor, upon his arrival, made an incision upon the body, which incision gaped, consequently showing that only about ten minutes had elapsed since death, it would only be necessary for the prisoner to show his whereabouts during that or a shortly preceding time, instead of during seven, eight, or twenty four hours previous to the finding of the body, as is now frequently required.

A question here occurs which is of interest, namely, is it allowable to remove, or in any way interfere with the body of a person found dead? The common opinion seems to be that a corpse must not in any way be interfered with until the arrival of a coroner or his deputy: this idea, however, will admit of a modification to this extent: if a body be found hanging, it is allowable to cut it down; if drowned, to remove it from the water; or, if exposed, it may be taken to a place of shelter, providing always that the corpse be not taken from the neighborhood or locality in which it is found, to a distance. It would not be permissible to remove it from one section of the city or county to another, till the qualified officers of the law had issued a permit; nor would a doctor's certificate of death be issuable in such a case, unless first sanctioned by the coroner or his legal and proper representative, which sanction the physician should *demand in writing*, so that in case any question arose as to the authority by which he acted, he would be able to exhibit it; it may seem needless to take this precaution, but we have known of instances in which a neglect of it has caused very unhappy results for the practitioner. Where bodies are found under peculiar circumstances or conditions, care must be exercised lest too hasty conclusions are jumped at as to the cause of death; thus, a corpse being found near or on the banks of a stream, presenting the appearances of a drowned body, would seem, at first view, to be prima facia evidence as to the cause and manner of death, but it is just here that a mistake may occur; for instance: We are aware of two instances in which dead bodies being found on the margins of streams, it was supposed that the deceased met their deaths through drowning. Investigation disclosed the fact that the necks of both were broken. A question then came up, how did the accident happen? In both instances witnesses who were present at the time naturally concluded that the individuals had been drowned. On making examination of the places at which the deceased parties dove into the stream it was found that the water was shallow at these situations, and that a mistake had been made by the persons who had met their deaths, in judging of its depth, and that in consequence they sprang into the water head first, with such great force as to bring their heads in violent contact with the bottom; thus accounting for the production of the unfortunate sequelæ. We can readily see how, if these men had died, there being no witnesses present, and their bodies had been found in a deeper portion of the stream than that which they entered, with their necks broken, it might be debated whether they had come to their ends by fair or foul means, and a coroner's physician might well be asked if an accident such as we have spoken of could take place, on the trial of a person who might be suspected of being party to the death of an individual.

A physician being called to see a body found dead, or a person who shortly afterwards dies, should at once notify the coroner of the place in which death has taken place, and if there is no

such officer conveniently attainable, then those whose functions under the law come nearest to the powers usually lodged in that officer, namely, a Justice of the Peace, an Alderman, Burgher, or the chief officer of police in the district in which the event has happened. All effects of the deceased, any weapons or instruments of any kind found in the neighborhood of the corpse; all loose articles of clothing; or in cases of poisoning, all packages, bottles, samples of food, excretions, etc., should be retained by the physician until delivered by him to the proper officers of the law, to wit: the Coroner, Justice of the Peace, etc., above spoken of, in order that they may be used as evidence, if necessary, by the court, and that others may not remove them without authority. Of course, where a man dies suddenly, as from a heart disease, an apoplexy, etc., these precautions do not apply. We speak only of where there is good reason for the exercise by the physician of a reasonable degree of judgment, such as any sane and intelligent man is bound to observe, and which he, under the circumstances, as a physician, is supposed to be particularly qualified to employ. Where a post-mortem examination is made, not only the injured parts should be examined, but likewise all the organs of the body, so that it may be known whether there existed any diseased condition of the subject which, either of itself, or taken in conjunction with the injuries, would be likely to produce death. In other words, given a series of injuries to a man in whom certain organs are more or less diseased, would such a circumstance in any way tend to increase the chances of a person's death. This is an important point to be attended to, for the defence might argue that a man died of a diseased condition of some organ or structure, and not of the wound. The attempt being to prove, if not absolute innocence of the affair, then simply an assault and battery. This would make a strong defence, if a medical examiner had neglected to carefully inspect all the organs of the body, and his inability to testify, pro or con, in the matter would probably result, where his was the leading testimony, in exonerating the prisoner from the charge of murder.

Correspondence.

Smallpox Hospitals.

Ed. Med. and Surg. Reporter:—

Inasmuch as students and practitioners, as a rule, do not have access to smallpox hospitals, a study of cases in the wards may prove of service to them when called to decide on the diagnosis of *variola*. The classical divisions of the disease are discrete, confluent and hemorrhagic. All authors treat fairly of the first two forms, but the hemorrhagic is imperfectly described, if at all referred to. It should be divided into two classes. First, that in which, from a purpuric state of the blood hemorrhage takes place into the fully formed vesicle; and second, that in which there is a hyperæmic state of the papule from the outset. This latter class is nearly always confluent, and usually fatal. It is difficult to describe these papules more definitely than to say that they are broad, but slightly elevated, and nearly identical in appearance with the eruption of malignant measles. These papules do not fill as the ordinary ones do, but remain low and diffuse. The skin between the papules has a diffuse redness. The symptoms of this group of hemorrhagic cases are also peculiar; many begin with little or no fever, and up to the time of the appearance of the eruption, there is nothing to indicate the grave condition of the patient.

To illustrate the importance of a diagnosis and the difficulty of making it, the following case may be of interest:—

A gentleman connected with one of the daily journals called on his physician, stating that he was unwell, but not in a degree to cause any apprehension. He was requested to remain in the house for a few days. After a day or two, a rash appeared, and was considered to be measles. The rash, instead of becoming less pronounced, in a few days increased, and then the diagnosis of smallpox was made. The patient when removed to the hospital was able to walk to the carriage. He died on the fifth day of hospital residence.

As has been previously suggested, this class of cases is liable to play great havoc with the reputation of the physician by mistake in diagnosis and prognosis.

Delirium in any case of smallpox after the eruption has appeared, coming on at night, is not a serious symptom; but if it lasts twenty-four or forty eight hours, the chances of recovery are small. Convulsions are rare, but they do occur.

The eruption in smallpox usually appears on the third or fourth day, and the umbilication of the vesicles, though quite common, is by no means pathognomonic. It often happens that the eruption appears on the conjunctiva, and when it does so, it is on the palpebral surface. It is to be distinguished from keratitis, which is of frequent occurrence. The fever of suppuration takes place about the ninth or tenth day, and in fatal cases, where the patient does not die within the first few days, death occurs about the twelfth of the eruption, from asthenia.

Prognosis.—The mortality, including children and adults, is about twenty per cent. With children alone the rate is higher. In closely analyzing the varieties, we find that adults with the discrete eruption usually recover, even if, from a purpuric state of the system, blood has been effused into the vesicles. It will be remembered that these cases were classed as one of the classes of the hemorrhagic. When the disease is confluent, or seems confluent, there is an increase of the danger; and in the malignant form

referred to as the secondary division of the hemorrhagic, the prognosis is uniformly bad. The treatment of the disease is mainly expectant and supporting. The eruption on the face is treated by the application of a solution of nitrate of silver ℈j to ℥j.

J. J. Reid, M.D.

New York City.

Pregnancy Complicated by a Fibroid Tumor of the Uterus.

Ed. Med. and Surg. Reporter:—

I herewith send you the report of an autopsy made upon a patient with the following history:—

On the 31st of December, 1881, I was called to see Maggie K., aged thirty-six years; single. I found her in a semi-unconscious condition, very restless, as though suffering considerable pain; her pulse weak and 120 per minute; action of the heart regular, but somewhat labored; mouth firmly closed, and was unable to swallow or speak; there were no convulsions. From what meagre history I could gather from those around her, found she had been in this condition for twenty-four hours before I saw her, that she had been treated for a tumor of the uterus; that she had been in ill health for several months; had not menstruated for two or three months, and that she had considerable vomiting, especially in the morning.

I made a vaginal examination, and taking into consideration the history of her case, came to the conclusion that she was pregnant, and that these symptoms might have been produced by some medicine taken for the purpose of producing abortion. I endeavored to get her to swallow some medicine, but she seemed too unconscious for that, and I did not succeed.

Being at the house of a stranger, I ordered her removal to the Mercy Hospital, this city, which was done, where she died the following afternoon, twenty-four hours after my first visit. The cause of her death being rather obscure, the coroner of this city was notified, who ordered Drs. James McCann, Joseph N. Dickson, and myself to make a post mortem examination of the body, which we did the next day, about twenty-four hours after death, when we found the following state of affairs: Post-mortem rigidity well marked; body well nourished; no marks of external violence. On opening the abdominal cavity several tumors of the uterus were discovered; one on the right iliac fossa, firmly adherent and dipping into the pelvis, very resisting and somewhat nodulated; another, of smaller size, a fluctuating tumor, which was firmly attached to the first and slightly overlying it to the left, being firmly adherent to the sigmoid flexure of the colon, the bladder, and pelvic fascia.

On dividing some of these adhesions they proved to be the round and broad ligaments of the uterus. After dissecting out this tumor and passing a probe into it through the canal of the uterus, and laying it open, it was found to be the uterus, containing a fœtus of about nine weeks.

The right tumor, upon incision, was found to be a solid fibroid, and in size about six by four inches in diameter. The right ovary was atrophied, but the left seemed in a fair condition of health.

The stomach contained about eight ounces of a dark, grumous, coffee-colored liquid. The mucous membrane at the cardiac end was thrown into rugæ, and separated readily from the submucous tissue. The pyloric end gave evidence of rather intense inflammation. The heart was normal in size and external appearance; on opening the left cavities, found the muscular structure, valves and internal lining membranes normal, but attached to the border of the mitral valve was a firmly organized, fibrinous clot, about four inches long and extending from the ventricle into the aorta. The semilunar valves of the aorta were perfect in structure. On section of the right side of the heart, the muscular structure, valves and internal lining membrane were here also found normal. But here another clot was found, not as firmly organized in the vena cava as in the right auricle and ventricle. This same clot nearly filled the auricle, extending through the auriculo ventricular opening, attached to the tricuspid valve and forming a clot in the right ventricle, which extended into the pulmonary artery to its bifurcation. and was, in size, nearly the capacity of the artery. The spleen was small and of normal structure. Kidneys large and in a condition of fatty degeneration, the structure being very much softened. The bladder contained about eight ounces of urine. Liver normal in structure and size, but very highly congested.

The case is certainly an interesting one, as it shows that a fibroid tumor of the uterus will not prevent pregnancy. As to the cause of her death; she had badly diseased kidneys. Were the symptoms of the last two days of her life produced by uræmic poisoning and subsequent heart clot? or was death produced by some irritating emmenagogue taken in an over dose? The stomach indicated a high stage of irritation, but analysis of its contents gave negative results. Oil of savine might have been taken, as it cannot be detected by any odor and is said to produce paralysis of the heart and heart clot, so well marked in this case. The verdict of the coroner's jury was that: "The said Maggie K. died from blood clots." About as intelligent a verdict would have been that she died for want of breath.

Pittsburgh, Pa. D. A. Hengst, M.D.

Extirpation of Thyroid Gland by Enucleation.

Ed. Med. and Surg. Reporter:—

In the *Record* of December 31st, last, there is a brief account of the excision of the thyroid gland, by Mr. Whitehead, of the Royal Manchester Infirmary, with the observation, "That it may be classed among the notable operations of surgery." A similar operation having been performed at the St. Mary's Hospital, in this city, with good results, I send you notes of same.

Gertrude Baker, aged three years, having a tumor involving the thyroid gland; first noticed about a year since, and for the last few months developing very rapidly, and becoming so large as to interfere with respiration.

Operation Dec. 6th, 1881, by Dr. Wm. A. Byrd, assisted by Doctors J. C. Hearne, of Hannibal, Mo., M. Rooney, House Physician, J. B. Shawgo, and G. W. Connell, of Quincy. Loss of blood

was moderate, and recovery rapid; the closing of the large denuded surface being hastened by skin-grafting. Weight of tumor eight ounces. Discharged December 22d.

A parotid gland was removed from Andrew Villslagh, by the same operation, followed by rapid recovery, and very slight facial deformity, May 10th, 1881.

Dr. Byrd proposes to give a full account of these operations as soon as practicable, illustrated from photographs.

Quincy, Ill. G. W. CONNELL, M.D.

NEWS AND MISCELLANY.

Dr. Joseph F. Edwards

Has accepted the position of assistant editor of the MEDICAL AND SURGICAL REPORTER. Dr. Edwards is already known to the profession through the *American Specialist*, of which he was editor last year, and also by his various works on "How a Person Afflicted with Bright's Disease Ought to Live," "Constipation," "Dyspepsia," "Malaria," etc. We can promise our readers that they will have a constantly improving journal, through his energy and knowledge.

Vital Statistics.

From the City Registrar's office of Providence, R.I., we note the following interesting statistics: Total death rate for 1881, 20.45 per 1000. Among whites, 20.13 per 1000; colored, 29.34 per 1000. American parentage, 20.67 per 1000. Foreign parentage, 20.26 per 1000. Thirty per cent. of all the deaths were fifty years of age or over. Greatest number of deaths occurred in August. The following point is very noteworthy: "There were 2307 persons vaccinated at the office of the Superintendent of Health (964 more than in 1880) and 1984 certificates of vaccination given to school children. The population is 104,000. Now, there has been no death from smallpox in Providence since July, 1875, and only one death since 1873." There were 16 deaths over 90, and one over 100 years of age.

Guiteau's Opinion of Experts.

That Guiteau possesses a very level head on some points, at least, is shown by the following remarks made by him to the court: "That's a first-class decision, Judge; that's all I want to get before the jury—what I said at that time relative to the causes that impelled me upon the President. As for the rest I don't care a snap. I would not give fifty cents a bushel for this expert testimony. If I had money enough I could get fifty of the best experts in the country to swear that I am as crazy as a loon. That's just how much that kind of evidence is worth."

Death Under Chloroform and Ether.

—The London *Lancet*, of December 31st, 1881, says: Last week a patient died at the Great Northern Hospital, while under the influence of a mixture of chloroform and ether, administered preparatory to the removal of the nail of the great toe. The anæsthetic was given on lint, and the operation was completed, when it was discovered that the pulse had ceased, and the patient succumbed in spite of every effort adopted to restore animation.

Items.

—The chair of Natural History, at Edinburgh, has been offered to Dr. Francis M. Balfour, F.R.S., author of the treatise on Comparative Embryology.

—Mr. L. O. Howell, Jr., has submitted to the Board of Health of this city a code of laws for the regulation of plumbing and drainage. The matter has been referred to the Sanitary Committee.

—The Executive Committee of the National Board of Health, in session on January 20th, officially declared smallpox to be epidemic in the United States, and appropriated two thousand dollars to prevent its spread in the District of Columbia.

—Domestic physiology: "Eight parts in ten of the blood consists of pure water; do you remark that, Mrs. Tooflorida?" "I do, sir, and if it's your own blood you are talking about, Mr. Tooflorida, take my word for it the other two parts consist of whisky."—*New York Commercial Advertiser.*

MARRIAGES.

LOGAN—OLMSTEAD.—On the evening of Dec. 29th, 1881, in the First Presbyterian Church of Scranton, Pa., by Rev. S. C. Logan, D.D., Harry V. Logan, M.D., eldest son of the officiating clergyman, and Miss Mary M. Olmstead, only daughter of Mr. Richard W. Olmstead, all of Scranton, Pa.

LYNTON—SMITH—Dec. 15th, 1881, by Rev. S. S. Wylie, at the residence of D. R. Smith, Harry M. Lynton, M.D., of New York City, and Miss Saidie E., eldest daughter of D. R. Smith, of near Middle Spring, Pa.

MILLER—FOREPAUGH.—On Wednesday, January 11th, by Rev. George Dana Boardman, D.D., Dr. S. T. Miller, of Paulsboro, N. J., and Jennie Forepaugh, of Philadelphia. No cards.

PRATT—CATHCART.—On Thursday, December 29th, 1881, at the residence of the bride's father, in Concord, Mich., by Rev. C. P. Quick, Dr. E. B. Pratt, of Brownville, N. Y., and Miss Sara E. Cathcart, of Bay City, Mich.

RUGG—HAGER.—In Proctorsville, Vt., Dec. 28th, by Rev. William H. Rugg, of Perkinsville, David F. Rugg, M.D., of Hartland, and Julia A. Hager of Proctorsville.

WEBB—VANDERBILT.—In New York, on Tuesday, December 20th, 1881, at St. Bartholomew's Church, by the Right Rev. the Bishop of New York, the Rev. Dr. Cooke, and the Rev. Dr. Howland, Dr. William Seward Webb and Lila Osgood, daughter of William H. Vanderbilt.

DEATHS.

BARRY.—In Brooklyn, at the residence of his father-in-law, on Friday, Jan. 6th, Dr. Robert A. Barry, of New York, in the 58th year of his age.

BEESLEY.—At Dennisville, N. J., December 13th, 1881, Maurice Beesley, M.D., in his 77th year.

MOORE.—On the 11th inst., at Chicago, Ill., Dr. Jos. C. Moore, in the 37th year of his age.

NEEDHAM.—Dr. W. C. H. Needham, State Senator of Ohio, of the Gallipolis district, died recently, of typhoid pneumonia.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1301.] PHILADELPHIA, FEBRUARY 4, 1882. [Vol. XLVI.—No. 5.

Original Department.

Lecture.

EXTRAVASATION OF URINE.

BY FESSENDEN NOTT OTIS, M.D.,

Clinical Professor of Diseases of the Genito-urinary System, in the College of Physicians and Surgeons, New York.

Gentlemen:—On account of failure of the usual conveyance, it was impossible for many of you to attend my last clinic at Blackwell's Island. One of the cases presented on that day was of unusual importance, so much so that it appears to me worthy of occupying a share of your attention to-day, especially as we shall probably have an opportunity of watching its subsequent development. I will, therefore, give you its history up to the present time.

On Tuesday last I went to the Island to make my ordinary rounds, and inquired if there were any new cases of importance to be looked after. Was informed there was a patient, a man, who had a slight swelling in the perineum, and had had retention of the urine, which the house surgeon had easily relieved; the swelling was being poulticed. From having had some interesting experience with slight perineal swellings, I was interested to see the case. Examination showed, not only a perineal swelling, but some œdema of the scrotum. The scrotal swelling, which had come on within an hour or two, was translucent, rosy in color. The patient complained of great difficulty in passing his water. When I asked him to urinate the urine came away in drops. On further inquiry I found that he had been the subject of gonorrhœa several times, but he had never had a stricture, nor any recent gonorrhœal trouble, nor any difficulty with urination until within a few days. He had some fever, which was attributed to the perineal inflammation. When I saw him the temperature was 102.5° Fahrenheit, and the pulse was about 115 or 120. The patient was informed that it was necessary to open an abscess which I believed was present in the perineum, although there was very little fluctuation or other positive evidence.. He declined, however, to have anything done, believing that he was doing very well; he insisted that he was passing his water better than he had done, and he did not see any reason why he should be operated on, and he did not propose to be operated on. I urged him, by all the considerations which I could bring to bear, to allow me to operate on him, assuring him that a very grave accident had occurred; that there had been an abscess of the penis, which had opened into the urethra; that through this opening urine had found its way into the tissues of the scrotum; that this innocent looking œdema of the scrotum was nothing more nor less than the result of urinary infiltration which threatened destruction of important parts within a very few hours, and that the extravasation was likely to extend to the tissues of the abdomen. I presented to him, in as strong a light as possible, the dangers attending delay, but could not prevail upon him to allow me to operate. His only reply was, that he would not be operated upon to-day. Having no other alternative, I passed a soft rubber catheter into the bladder and left it, with instructions that when, through the advance of the infiltration, the patient should be brought to consent, an operation would be performed; for, of course, as long as he was in his right mind, we could not compel him to submit to an operation, and besides there

was a possibility that an opening might occur through the external parts, by suppuration, and so afford relief.

The next morning the house surgeon came to my office with word that the size of the scrotal tumor had increased considerably; that the tissues were becoming of quite a dark red, and that swelling had taken place above the pubes. He also stated that slight redness covered an area of five or six inches square in the integument of the right groin. After arriving at the hospital, I found the scrotum fully six inches in its long diameter and nearly five in the transverse—pitting easily on pressure. The perineal swelling was somewhat more prominent, very firm, and very slight if any sense of fluctuation imparted to the touch. The patient was etherized and a grooved staff, No. 15, was passed easily into the bladder. This was held firmly in the median line, by my friend, Dr. Sturgis, who kindly assisted in the operation. Then passing my finger into the rectum, in order to avoid wounding the gut, I made my perineal incision two and a half inches in length, and deeply, until the sound was reached. Almost at the first stroke of the knife there was a gush of fetid pus, at least two ounces.

I introduced a broad director alongside the sound and on into the bladder, and then, removing this instrument, passed a large catheter along the director into the bladder and removed the director. A large soft catheter was then introduced into the bladder through the perineal opening, in order to keep the viscus well drained. In passing, allow me to remark that this is the plan I always follow in perineal sections, thus keeping the tissues free from danger of subsequent infiltration of urine. I made five incisions into the swollen scrotum, from two to four inches in length, extending through the superficial fascia and cellular tissue, down to the tunica-vaginalis, and by a little compression with my hands the urine and serum poured out freely, and the tissues were emptied, to a very considerable extent, of this irritating material. Oakum smeared with vaseline was then put into the cuts, a bandage applied, and the patient was carried to his bed. To-day, the day after the operation, I am informed that the patient is quite comfortable; the temperature has gone down two degrees, the color in the groin is fainter, the swelling has not increased.

This trouble might have gone on further, and, as usually occurs in cases of extravasation, we should have infiltration of urine in the groin and integument over the abdomen, requiring further incisions to be made. From the report of the case to-day, however, I trust this will not be necessary.

A few words now with regard to the manner in which this accident occurs. The urethra is studded with little follicles or racemose glands, some of which are at the bottom of a little canal, or canaliculus, and from these the lubricating fluid of the urethra is in great measure derived. There is notably one found in almost all urethræ, on the superior surface of the canal, about half an inch from the meatus externus, the lacuna magna, which is often large enough to admit the end of a small-sized probe. These little secreting glands at the bottom of depressions, which are more numerous in some urethræ than in others, sometimes become inflamed independently of inflammation of the surrounding tissue. That is to say, there sometimes occurs trouble localized in a single one of these depressions, and when this is the case, it is usually the result of a stricture of large calibre; a stricture which is just sufficient to form a slight obstruction, behind which pus or other material may lodge and keep the parts in an abnormal condition, ready to take on inflammation. Such is the explanation of an accident like that which occurred in our patient, as given by authorities who have paid particular attention to this subject. Inflammation having been thus excited in one of these follicles, suppuration takes place, pus burrows along, sometimes a distance of half an inch or an inch; sometimes it makes its escape externally in the shortest direction. In any case we have a passage formed through the urethra into the tissues, and into this urine readily finds its way, sometimes, however, in so small quantity that it simply gets up a little accumulation of plastic material, which finally forms a small nodule and stops the further progress of the trouble. Again, the opening may be larger, and urine may find its way into it in greater quantity, and cause active inflammation in the tissues, forming an abscess, through which extensive infiltration may take place.

This subject is one of such great importance that I will be obliged to complete my remarks on a future occasion, the first part of this hour having been occupied by the presentation of other cases. Owing to the fact that writers have said a very great distinction should be made between the little bunches which result from slight departures from the urethra and an abscess the result of urinary extravasation, the subject of perineal swellings has come to be very greatly misunderstood. I insist upon it that no difference exists in the

nature of the two cases, and whenever a swelling of the perineum occurs independent of an immediate injury, or a furuncular trouble, we may be sure that in ninety-nine cases out of a hundred it is the result of follicular penetration of the urethral canal, from the causes previously stated, and that it will go on to the formation of an abscess of greater or less size; and we cannot tell in any case, whether what appears to be a small affair is going to remain so, or whether it is going on to the destruction of a large amount of tissue. Some of the most innocent appearing cases have gone on rapidly, within a few hours, to result in infiltration of urine and speedy death of the patient.

(To be Continued.)

COMMUNICATIONS.

ON THE THERAPEUTIC USE OF JABORANDI AND PILOCARPINE IN EYE DISEASES.

BY M. LANDESBERG, M.D.,
Of Philadelphia.

The results of my first trials with jaborandi and pilocarpine, published in numbers 298 and 299, vol. IX, of the Philadelphia *Medical Times*, and in vol. VIII, 1, of Knapp's *Archives of Ophthalmology*, have justified me in endorsing the important therapeutic value of this new remedy, and in claiming for it a superiority over all hitherto known absorbent remedies in instances of serous effusions, intraocular hemorrhages and opacities of vitreous. The diversity of opinion which still exists among the general as well as the special profession in regard to the therapeutic value of the drug; the objections which are often raised against its use, on account of the unpleasant after effects which so frequently follow its administration, prompt me to give a further account of my experiences gained from the continued use of jaborandi and pilocarpine, in the various forms of eye diseases. But in order to show the intrinsic properties of this remedy in all purity, I shall give notes only of such cases in which I employed either jaborandi or pilocarpine, without the simultaneous use of any other medicine.

(A) *Extract of Jaborandi* has been used in the following eye affections:—

1. *Parenchymatous keratitis.* There was no effect whatever in any of the ten cases (eight children and two men) in which the remedy was administered for two succeeding weeks. The morbid process ran its course as if no treatment had taken place at all.

2. *Panophthalmitis*, following discision of cataract in one case, and linear extraction of cataract in another. The treatment resulted in relieving the severe pain and in abating somewhat the symptoms of inflammation. But it had not the slightest effect upon the course of the morbid process.

3. *Hemorrhages into the anterior chamber and vitreous*, consequent upon a blow on the eye, in seven cases. Vision was reduced to perception of light only. In three patients, ten doses of jaborandi, in four patients, fifteen doses, taken within two weeks, brought about perfect recovery.

4. *Irido-choroiditis, with opacities of vitreous*, in three women between the ages of eighteen and twenty-six years. In the first two cases, sixteen doses of jaborandi, taken within three weeks, restored the normal condition of the vitreous and brought vision from $\frac{20}{70}$, resp. $\frac{15}{40}$, to $\frac{20}{20}$, resp. $\frac{15}{20}$. In the third case, in which mercurial treatment and iridectomy did not check the morbid process, seventeen doses of jaborandi, taken within four weeks, resulted in a perfect cure. Vision increased from $\frac{20}{70}$ to $\frac{20}{40}$. Only two small flocks were left in the vitreous.

5. *Irido-choroiditis serosa, with opacities of vitreous*, in two cases. In the case of a shoemaker, fifty years old, ten doses of jaborandi, taken within three weeks, brought vision from $\frac{20}{70}$ to $\frac{20}{30}$, and made vitreous perfectly transparent. In the other case, of a woman of forty-eight years, in whom vision was reduced to counting fingers at 3′, fifteen doses of jaborandi, taken within three weeks, brought about perfect recovery. Vision increased to $\frac{20}{30}$, and opacities of vitreous vanished entirely.

6. *Æquatorial choroiditis with circumscribed choroidal atrophies, diffuse infiltration of the retina, and opacities of vitreous.* The vitreous humor had the form of a bunch, composed of numerous large, thick tufts, which spread, fan-like, into the space of the vitreous, veiling almost totally the background of the eye. Vision was reduced to counting fingers at 5′. Patient, workman's wife, twenty-eight years, had remarked for eighteen months the gradual decrease of vision in her left eye.

After the fifth dose of jaborandi V. was $\frac{20}{50}$. Opacities of vitreous were considerably thinner and more transparent. Some fascicles of the bunch had totally vanished; others had become very thin; and still others had dissolved into small, roundish, star like bodies, which moved in the vitreous like a shower of shooting stars.

After the tenth dose of jaborandi V. was $\frac{20}{40}$, and Jaeger 1. Vitreous contained only some

very fine opacities and one large membranous flock.

After the fourteenth dose of jaborandi, V $\frac{20}{40}$. Only few fine opacities of vitreous are to be seen.

7. *Neuro-retinitis*, in two cases:—

In the first case, of a servant girl, 36 years old, the affection developed consequent upon the suppression of the menstrual flow, which had been caused by taking a cold. Vision of either eye was reduced to $\frac{20}{70}$. Fifteen doses of jaborandi, taken within three weeks, brought about perfect recovery.

In the second case, of a woman of 45 years, whose monthlies had stopped five years previously, the affection, gradually progressing, had reduced vision to $\frac{20}{200}$ in the right eye, and $\frac{20}{70}$ in the left one. Eighteen doses of jaborandi, taken within four weeks, improved the vision of the left eye to $\frac{20}{40}$, but had no effect whatever upon the condition of the right eye. The final issue of the latter was atrophy of the optic disc.

8. *Genuine atrophy of the optic disc*, in three cases:—

The first case was of a factory girl, 22 years old, whose eye affection developed in the course of erysipelas of the face and head. The right eye showed complete amaurosis. The left eye had V $\frac{20}{70}$. Eighteen doses of jaborandi, taken within twenty-five days, restored vision of the left eye to $\frac{20}{30}$. There was no effect upon the right eye.

In the second case, of a shoemaker, 40 years old, without obvious cause, eighteen doses of jaborandi, taken within four weeks, had the result to bring vision from $\frac{20}{70}$ resp. $\frac{20}{200}$ to $\frac{20}{40}$ resp. $\frac{20}{70}$.

In the third case, of a merchant, 51 years old, the affection had set in in consequence of an injury of the head, received in falling from the steps. Nineteen doses of jaborandi, taken within thirty days, had the effect of improving the sight of the right eye from counting fingers at 3′ to counting fingers at 6′, and the sight of the left eye from $\frac{20}{50}$ to $\frac{20}{30}$.

9. *Retinitis e morbo Brightii*, in the case of a saloon keeper, 47 years old. Seventeen doses of jaborandi, taken within thirty-one days, brought vision of the right eye from $\frac{20}{70}$ to $\frac{20}{40}$, and of the left eye from $\frac{15}{70}$ to $\frac{20}{50}$. The optic discs became less choked. Most of the hemorrhages were resolved. General constitution improved.

10. *Detachment of the retina*, in four cases:—

Of the three cases of detachment of the retina in consequence of progressive myopia, the treatment with jaborandi had no effect whatever in two instances, and a moderate result only in one case. In the fourth case of detachment of retina, which had been caused by hemorrhage between choroidea and retina, consequent upon a blow upon the eyeball, complete recovery was obtained by nine doses of jaborandi, taken within two weeks.

(B) *Muriate of pilocarpine* has been used in the following affections:—

1. *Paralysis of the extern muscle of the right eye*, consequent upon exposure to cold, in two cases. There was complete recovery after five resp. eight subcutaneous injections of pilocarpine.

2. *Hemorrhage into the vitreous*, occurring spontaneously seven months after a successful linear extraction of cataract. When I saw the patient, five days after the occurrence, he counted with this eye fingers at 5′ distance. The background of the eye could not be seen. Seven injections of pilocarpine, administered in the course of two weeks, brought about complete resorption of the hemorrhage, and restored vision to $\frac{15}{40}$.

3. *Central retinitis, with large, floating opacities of vitreous*, caused by a blow upon the right eye. Twenty-four hours after the accident, examination showed V. $\frac{15}{70}$ with concave $\frac{1}{3}$, Jaeger 3. Anterior chamber shallow; tension somewhat diminished. One application of Heurteloup gave no improvement. After seven subcutaneous injections of pilocarpine, there was V. $\frac{15}{40}$ with concave $\frac{1}{6}$, Jaeger 2. There is only one large flock in the vitreous left. All other opacities have vanished. After thirteen injections, V. $\frac{15}{20}$ with concave $\frac{1}{8}$ (the degree of myopia as had been before the injury), Jaeger 1. Anterior chamber and tension normal; serous infiltration and swelling of retina near macula lutea entirely vanished; vitreous perfectly clear. After a minute research one small, oblong opacity of vitreous, which has the shape of a spermatozoön, is discovered.

4. *Large, dense opacities of vitreous* in a lady, whose right eye had been struck by the elbow of her child. Eleven subcutaneous injections of pilocarpine effected total resorption of the opacities and restored vision from $\frac{15}{30}$ to $\frac{15}{20}$.

5. *Chorio-retinitis, with opacities of vitreous*, in consequence of progressive myopia, in a lady of fifty-two years of age. There was:—

Right Eye. M. $\frac{1}{3}$ S. $\frac{15}{50}$. Numerous large flocks in vitreous. Intense sclereolasia posterior. Large choroidal atrophies. Œdema of the retina and large, milky patches along the vessels.

Left Eye. Central vision totally abolished. Counts fingers at 2′ distance, peripherically outside. Atrophy of the retina, over which are scattered patches of pigment, extravasations and

exudations, which hide the vessels. The region of the macula lutea is of milky appearance. Vitreous contains filiform opacities. Fifteen subcutaneous injections of pilocarpine had the following effect:—

Right Eye. M. $\frac{1}{3}$–$\frac{1}{2}$. V. $\frac{15}{30}$. Only two small flocks in vitreous left. Œdema of the retina and milky exudations vanished.

Left Eye. Vision slightly peripheric. Counts fingers at 12′. Reads Jaeger 13. Extravasations and exudations vanished. Macula lutea is covered by a patch of pigment. Vitreous is clear.

6. *Detachment of retina.* In three cases of detachment of retina of long standing pilocarpine was of no avail.

In one case of recent detachment of retina, in a patient of 51 years of age, whose healthy eye showed myopia $\frac{1}{8}$, the treatment with subcutaneous injections of pilocarpine yielded a very favorable result, also the latter did not remain stationary. The retina reattached almost entirely, and central vision increased from $\frac{15}{100}$ to $\frac{15}{40}$. The relapse, after about four months, was again successfully combated by the same treatment. But when the detachment of retina set in for the third time, after an interval of nearly five months, patient acquiesced in his fate.

In another instance of recent detachment of the retina in both eyes, the improvement in the morbid condition of either eye was very remarkable after seven injections of pilocarpine. But patient withdrew from further treatment.

7. *Hemorrhagic retinitis* in the left eye of a boy of eight years of age. Vision was $\frac{15}{70}$; Jaeger 5; fixation somewhat peripheric; central scotoma; field of vision normal; retina occupied by numerous extravasations of blood, of the size of a pin's head. Large hemorrhagic patch between optic disc and macula lutea. Vitreous clear. The appearance of a dark spot before the eye, about three days ago, had first attracted the attention of the boy to the present trouble.

There is no assignable cause of the affection; general health is good; respiratory and circulatory organs are normal. There is no symptom whatever of hemorrhagic diathesis.

Eleven subcutaneous injections of pilocarpine, made within three weeks, effected a total resorption of the small hemorrhages. The large extravasation broke into numerous small dots. Vision became $\frac{15}{40}$, and fixation central.

8. *Retinitis pigmentosa* in the following case: B., printer's son, nine years old, was brought to me on account of impairment of vision and of hearing, which had gradually developed in the course of the last two years; general health has always been good and mental capacities have been normal.

The external appearance of the eyes and ears are normal; V. R. $\frac{20}{70}$; Jaeg. 7; V. L. $\frac{15}{70}$; Jaeg. 7; field of vision shows concentric limitation in the peripheric parts. This limitation is about twice as large in a dark room lighted by gas, than at daylight. On asking the patient, I find that the boy has great difficulty to move in the dark of the evening.

The ophthalmoscope reveals: Optic discs somewhat flat, slightly grayish; papillary region distinct; arteries contracted; veins normal. In the peripheric parts of the retina there is a continuous network of fine, star-shaped patches of pigment, deposited along the vessels; maculæ luteæ are distinct.

With the right ear patient hears whispering at 8′, with the left at 6′ distance; medium loud voice is heard at 12′. The membranæ tympani are somewhat opaque. Passage for ear-douche is good. No noises.

There is no consanguinity between the parents, and no hereditary tendency in the respective families. Syphilitic taint is denied by both parents. The boy is the only child born after ten years of married life.

Ten subcutaneous injections of pilocarpine, made within twenty-five days, had the following effect:—

V. R. $\frac{20}{40}$, Jaeger 2. V. L. $\frac{20}{50}$, Jaeger 4. Field of vision free by daylight; by gaslight somewhat limited in its peripheric parts. Optic discs are of somewhat reddish hue. The pigmentary deposits are flatter, fainter in hue, and transparent. Hemeralopia is considerably improved. The condition of the ears is unchanged.

9. *Double optic neuritis*, in the following case:— Miss G., twenty-five years old, had noticed a considerable decrease in the vision of the right eye, the day after the right side of the face had been exposed to a strong, cold draught. The sight failed, consequently, so rapidly, that when I saw patient, on the third day after the occurrence, the condition was as follows:—

Right Eye. Outside appearance normal. The movements of the eyeball outside and upward, the gently pushing of the latter into the orbital cavity, are painful; the pain had been more intense in the first two days. The region around the foramen supra-orbitale is very sensitive to the touch. Vision is reduced to counting fingers at 10′ to 12′ distance. The fixation is somewhat peripheric. Field of vision is slightly narrowed in the upper periphery. Reaction of pupil is sluggish. Tension is normal. Refracting media

are clear. Optic disc is of reddish-gray color, prominent, opaque and swollen. Its vessels are hidden by the serous infiltration, which extends over the peripapillary region. Small hemorrhagic patches are scattered over the optic disc, and one large oblong extravasation of blood covers the peripapillary part of the inferior branch of the ophthalmic vein. The inner border of the optic disc is occupied by a slightly prominent grayish plaque. The arteries are contracted, the veins are engorged, dark-red and tortuous.

Left Eye normal. General health has always been good. Percussion of the head is not painful. Mental capacities are unimpaired. No headaches and no syphilitic taint. Circulatory and respiratory organs are normal.

After five subcutaneous injections of pilocarpine there was V. $\frac{15}{200}$, Jaeger 9. Fixation somewhat peripheric. Perception of colors normal. The movements of the eyeball, the pushing of the latter into the orbital cavity, are painless. Pressure on the exit of the supra-orbital nerve causes only a slightly uneasy sensation. The swelling of the optic disc is somewhat diminished. The small hemorrhagic patches have vanished.

After ten injections of pilocarpine there was V. $\frac{15}{70}$, Jaeger 5. Fixation slightly peripheric. Field of vision normal. All traces of pain vanished. The œdema of the optic disc considerably diminished. The large hemorrhagic patch partly resorbed. The grayish plaque flattened.

No further improvement after the fifteenth dose. Heurteloups and iodide of potassium, to which I resorted, were of no avail.

During a further observation of about three months, the optic disc remained slightly swelled, dusky, and of bluish-gray color. The vessels were veiled by a delicate, diffuse opacity; the peripapillary region was indistinct. The arteries were thin, the veins somewhat engorged and tortuous. Vision decreased to $\frac{15}{100}$, Jaeger 8.

10. *Genuine atrophy of the optic disc, with central scotoma*, in two cases:—

In the first case, of a merchant, forty-eight years of age, fifteen subcutaneous injections of pilocarpine, made within twenty-three days, brought vision from $\frac{15}{200}$ to $\frac{15}{50}$ in either eye.

In the second case, of a merchant, fifty years of age, nineteen subcutaneous injections of pilocarpine, made within a month, brought vision from $\frac{15}{200}$ to $\frac{15}{50}$ in the right eye, and from $\frac{15}{100}$ to $\frac{15}{50}$ in the left eye.

11. *Amaurosis of both eyes*, caused by a uræmic attack in the course of scarlatina, in the case of a girl of eleven years of age. Nephritis developed on the twentieth day of the affection, in consequence of exposure to cold. After a uræmic attack, total blindness set in in both eyes. Perception of light reappeared after twelve hours, and the sight improved spontaneously in the following two days, so far that the patient was able to distinguish the features of her parents. When I saw the girl, on the eighth day after the occurrence, she counted fingers with either eye at 2′ distance. Quantitative perception of light was good in all directions of the visual field. Pupils were somewhat dilated, but of normal shape and reaction. Refracting media and tension were normal.

Ophthalmoscopic examination was negative. There was some hydrops around the ankles. Urine contained albumen.

After the second injection of pilocarpine vision increased to $\frac{2}{70}$, and became $\frac{15}{20}$ in either eye after the ninth injection. Hydrops and albumen disappeared.

12. *Chronic Scleritis and irido-choroiditis, and opacities of vitreous* in the left eye, in the case of a waiter of twenty-seven years of age. The affection had lasted for about three years. The different kinds of treatment to which the patient had been subjected had afforded but little relief. Eighteen subcutaneous injections of pilocarpine, administered within five weeks, resulted in clearing up the vitreous, in improving the vision from $\frac{10}{200}$ to $\frac{15}{70}$, and in bringing the morbid process to a stand-still.

General Remarks.—Either preparation was administered two or three hours after a light supper had been taken, the patient being in bed, covered with a blanket. Jaborandi was given in warm tea, in doses which varied from fifty drops to four teaspoonfuls. Of forty-three adults whom I treated with jaborandi, the desired effect was produced with fifty drops in five; with one teaspoonful and a half in ten; with two teaspoonfuls in twenty; with three teaspoonfuls in five; and with four teaspoonfuls in three patients. The effect took place in about fifteen to thirty minutes after the ingestion of the drug, beginning with salivary secretion; perspiration followed within ten to thirty minutes afterward. In no instance a reverse condition was observed, and in no case the absence of either effect noted. Salivation lasted for about one hour and a half to two and three hours; perspiration subsided earlier. There was no ill effect whatever in ten patients; in seven patients the unpleasant after symptoms were very considerable; in the others they were but slight.

My experience in the use of jaborandi, gained in adults, totally failed when I began to try the remedy in children. The first child which I treated with jaborandi was a girl of seven years, who suffered from parenchymatous keratitis of both eyes. The mother was ordered to give at first thirty drops, and eventually to raise the dose to sixty drops. But even the latter dose failed to produce any effect. On two teaspoonfuls the skin became somewhat moist. A full benefit was only obtained by injection of four teaspoonfuls of the drug. Perspiration was copious for about an hour. Salivation was almost absent. There were no unpleasant after symptoms whatever. In the other seven cases of parenchymatous keratitis, observed in children between seven and twelve years of age, I had also to recur to high doses of jaborandi in order to produce the desired effect. In four children between nine and twelve years the dose was four teaspoonfuls; in three children, between seven and nine years, five teaspoonfuls. Salivation was absent in three children, and but very slight in four. Perspiration was less copious than in adults, and of shorter duration. The ill after-effects were very slight. Vomiting occurred only once, in a child which had taken a large supper before the ingestion of jaborandi. Nausea occurred in two children. The only inconvenience generally felt was pain in the abdomen.

The effective dose for subcutaneous injections of pilocarpine, in adults, varied from $\frac{1}{4}$ to $\frac{3}{4}$ of a grain. Salivation generally set in within two to ten minutes; in several cases, however, instantaneously—before I had time to withdraw the needle. Perspiration followed after, about two to ten minutes. The duration of salivation was longer than perspiration; the latter kept on for an hour to two hours, the former continued for half an hour to an hour longer. The action of the drug began, in all instances, with increase in the pulse-rate and mostly with congestion to the head. The respiration was accelerated, and in several cases difficult. In a few instances there was dyspnœa. This stage was the most unpleasant one to the patients. But these phenomena vanished as soon as salivary secretion made its appearance, and general easiness took place with the occurrence of perspiration. In the course of the process there was a slight fall in the temperature of the body; the patients felt chilly and they required warmer covering.

Of twenty-seven adults in whom I used subcutaneous injections of pilocarpine, the after symptoms were very stormy in two. Vomiting and nausea occurred after every injection, and the other inconveniences were very severe. In five patients there were no unpleasant after-effects at all. In the other patient the ill after-effects were but slight, and easily borne. Slight gastric catarrh was generally a consequence of the treatment, but it was entirely wanting in a few instances.

Inflammation of the subcutaneous tissue around the point of injection occurred only in one lady patient. The inflammation set in after every injection, but it was very slight, and subsided either spontaneously or on warm poultices.

In children, I had to administer from half a grain to one grain of pilocarpine, in order to gain a full effect. Perspiration was copious; salivation but moderate. The after symptoms either very slight or totally wanting. The children had not the slighest aversion to the treatment.

1912 *Arch Street, Philadelphia.*

Hospital Reports.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINIC BY JOHN ASHHURST, JR., M.D.,

Professor of Clinical Surgery in the University of Pennsylvania.

Reported by Wm. H. Morrison, M.D.

FRACTURE OF THE SHAFT OF THE FEMUR; FRACTURE OF BOTH BONES OF THE FOREARM; FRACTURE OF THE NECK OF THE FEMUR; TENOTOMY OF THE TENDO-ACHILLIS AND PLANTAR FASCIA.

Gentlemen:—I have the opportunity, at the beginning of the session, to show you several cases of fracture. These are cases that you will meet constantly in practice, and it is of extreme importance that you should be entirely familiar with their treatment, both for your own comfort and for that of your patients.

Fracture of the Shaft of the Femur.

This young man has sustained a fracture of the shaft of the thigh bone. He was walking along the top of a train of cars, and falling between two of them, he received a fracture about the middle, or a little below the middle, of the left femur.

This particular form of injury, fracture of the shaft, is, in adults, often the result of indirect violence. In children, the injury usually results from direct violence, as from a blow, or from a wagon wheel passing over the limb. This fracture often results from a fall upon the knee, or from a blow on the bent knee, in such a manner as to bring, as it were, the extremities of the bone together. A not unfrequent mode in which this injury is produced, is by a man sitting upon the platform of a car with his knee resting against the car in front. The cars suddenly come together, there is an approximation of the ends of the bone, and the thigh is broken. When it results from indirect violence, the line

of fracture is commonly oblique. In oblique fractures there is more marked shortening than in those which are transverse. In children, where the injury is the result of direct violence, the line of fracture is very apt to be transverse, and there is little shortening. I do not suppose that we shall find much shortening in this case, as extension has been applied for forty-eight hours. In measuring the thigh you should, in the first place, see that the pelvis is evenly elevated on both sides, and that the patient is lying squarely on his back. You can ascertain this by drawing a line from one anterior superior spinous process to the other, and then dropping a line perpendicular to this line, at its middle; the perpendicular line should, of course, come evenly between the limbs. We now have the patient squarely on his back, and if there is any difference in the length of the limbs we can ascertain it by measuring. The best points to use in measuring are the anterior superior spinous process and the corresponding internal malleolus. There is one source of fallacy: that is, one limb may naturally be shorter than the other. In a large number of persons one leg is shorter than the other. Now if a person whose right leg was naturally three-fourths of an inch or an inch shorter than the left sustained a fracture of the right leg, you can easily see that you could not derive much information from measurement. In this case the right leg measures almost thirty-four inches, while the left is not quite thirty-three inches. It is, of course, possible that the left leg was naturally an inch shorter than the right, but as we have the shortening on the side of fracture, the inference is that it is due to the fracture.

This is, perhaps, the most prominent symptom of fracture. Students are sometimes asked to give the most common symptom of fracture. The answer is "shortening." There are some exceptions to this rule; thus, in fracture of the patella, of the olecranon process of the ulna, and of the ensiform process of the sternum, you have lengthening, but with these exceptions, shortening is the rule, and is the most common symptom of fracture, and is particularly marked in fracture of the thigh.

Besides shortening, we have eversion of the foot. This patient has both feet about equally everted. If I ask him to invert the sound limb he does it very well, but when he attempts to invert the injured limb, he moves it very slightly, and if I try to invert it I give him pain. You must sometimes judge, not so much from the presence of eversion as from the absence of the power of inversion. Eversion of the foot occurs when there is fracture of any part of the thigh bone. It is particularly marked in fracture of the neck.

The explanation of this eversion is given differently by different authors. Some say that it is due to muscular action alone. Occasionally, in very rare cases, inversion of the foot is met with; these cases are explained by supposing that the muscles of the outer side of the limb are paralyzed. Mr. Erichsen gives this explanation.

It used to be said, without any very positive reason, that the eversion was due to the weight of the limb. This has been denied by those who believe exclusively in muscular action; but as in many other matters, the true explanation lies between these two extremes. Mr. Owen, an English surgeon, has performed the experiment, on the cadaver, of making a longitudinal section of the leg from the seat of fracture downward, and he has found that the outer side of the limb is the heavier, and that the centre of gravity lies in the outer side. So that by a mechanical necessity the foot is turned outward. Shortening and eversion are the two most important symptoms of fracture of the thigh.

Besides these, we have a symptom common to almost all fractures (but not to impacted fracture), *i.e.*, crepitus. I shall not put the patient in pain by trying to produce crepitus. Dr. Hughes distinguished it very clearly when the man was admitted. Sometimes you will fail to produce crepitus, unless you make extension. This is due to the fact that the ends of the bone may have become imbedded in the muscles and no part of the fragments be in contact. Of course, in all unimpacted fractures you have increased mobility.

There is another symptom to which I want to call attention, and that is slight tenderness and effusion in the knee joint. You see on this side of the thigh a slight abrasion, and you might suppose that the effusion was the result of direct injury, but such is not the case. Effusion into the knee joint is a characteristic symptom of all fractures of the thigh at or below the middle, and it is also met with in many fractures of the tibia. The explanation is interesting. The true explanation has been given by a French surgeon, Mr. Gosselin. It has been supposed to be due to direct injury of the joint. It often comes on some time after the injury. It was present in this case when the man was admitted, twenty hours after the injury. The correct explanation is this: at the seat of fracture, beside the bone being broken, there is great laceration of the muscles and cellular tissue, and much blood is thrown out. The blood gradually leaks down until it reaches the capsule of the joint; it does not enter the joint. That effusion is simply serous, synovial effusion. The blood reaches the outside of the capsule, there produces irritation, and a true synovitis is set up, as a result of this irritation. It is a mild form of subacute synovitis set up by the blood irritating the outer side of the capsule. Whenever you have synovitis, from any cause, you will have effusion into the joint.

I might call attention here to the way of distinguishing effusion in the joint from effusion around the joint. When I press the patella downward, I find that it floats. When I tap it, it at once rebounds. On the other hand, if the patella rested steadily on the femur, and there was no floating nor rebounding, I should feel sure that the effusion was extra-articular.

Here, then, we have the characteristic symptoms of fracture of the shaft of the femur: shortening, eversion of the foot, crepitus, increased mobility and effusion into the knee joint.

The treatment of fracture of the shaft of the thigh bone depends upon a consideration of these characteristic symptoms. There is shortening; you therefore need some means of extension. The older surgeons relied upon their hands to

make this extension, and upon splints to maintain it; but in modern time the weight extension has been adopted. It is applied in this manner. We first make what is called a stirrup, by means of a piece of board wider than the foot and a long strip of plaster that will extend from above one side of the knee around the foot piece and to above the opposite side of the knee. A short piece of plaster is placed on the inside of the foot piece, extending to each malleolus, in order to protect them. The two long strips are then applied in this manner to each side of the leg. Some surgeons carry the extension above the knee, but my own preference is to limit it below the knee, principally on account of this effusion. This would be increased by any constriction above the knee. There is no necessity for carrying the extension above the knee. Three shorter strips are then put around the limb, one just below the knee, one about the middle of the leg, and the other just above the ankle. Then over these plasters an ordinary roller is carried by spiral reverses of the lower extremity. The ends of the long strips that project above the knee are now turned over and secured by further turns of the bandage. A cord passes through a hole in the foot piece and over a pulley at the foot of the bed; to this a weight is fastened, by means of which continuous extension can be kept up. This is a very old mode of treatment. It was used by an eminent French surgeon, Gui de Chauliac, several hundred years ago, but this use of extension was forgotten, although it continued to be used in the treatment of joint diseases. Brodie used it for this purpose. The late Dr. Gurdon Buck revived its use in the treatment of fracture of the femur; and the method is now generally known as Buck's, or the American treatment.

The weight applied should not, as a rule, exceed twelve pounds. We have applied here one brick, which is estimated to weigh four or four and a half pounds. This afternoon we shall probably add another brick, and in the course of a week, a third. Some surgeons employ as much as twenty, thirty, or even forty pounds. I do not believe that there is any advantage in using such heavy weights; indeed, there may be harm in so doing. They might possibly, draw the ends of the bones asunder and so interfere with the union.

Besides extension, we need some support for the sides of the limb. Dr. Buck employed short splints around the limb. Others employed sand bags. I think that in fracture of the shaft of the femur you will obtain better results from the steady extension and the use of these old fashioned long splints. They are the same as were used by our predecessors without extension. These splints are from Physic's modification of Desault's apparatus. The outer splint should reach from the axilla to below the foot, and the inner from the groin to below the foot. They may be padded with cotton, a folded blanket, or, as we find convenient here, first wrapping the splints in a splint cloth, and then interposing between the splints and the limb, junk bags, *i. e.*, bags containing bran. In wrapping the splints in the splint cloth, you must be careful to allow for the difference in width of the two ends of the splint.

We now secure the splints to the limb by means of strips of bandage. Five are usually required; one at the ankle, one at the knee, one below the groin, one around the pelvis at the crest of the ilium, and one around the chest.

When the effusion into the knee joint goes down a little, and we can handle the joint without causing pain, we shall, at each dressing. if necessary, rotate the knee inward, in order to overcome the tendency to eversion. You see that by this dressing we fix the joints on both sides of the fracture. You may lay it down as a rule, that in all fractures of the long bones you must fix both the joint above and the one below the seat of fracture.

This dressing seems a little complicated when applied for the first time; but it is very simple, and requires but little attention after it has been adjusted, and it gives, I think, more satisfactory results than any other mode of treatment. The extension should be made in the line of the limb, and the leg should be in a state of slight abduction. When the patient has been removed to the ward, we shall make counter-extension, by elevating the foot of the bed.

The time required for healing is usually about eight weeks. After six or seven weeks, some form of fixed dressing, as plaster-of Paris or pasteboard splints, may be applied; but it is not safe to allow the patient to walk before eight weeks have elapsed. You may sometimes be tempted to allow the patient to go about sooner than this, and, as a result, you may have consecutive shortening. I remember a patient in the Pennsylvania Hospital who had made a good recovery from fracture of the thigh, and was allowed to go about at the end of six weeks. There was at that time one-fourth or one-half of an inch of shortening. After two or three days there was found two inches of shortening. At this time the callus uniting the bones is soft, and the pressure from walking readily causes consecutive shortening.

Fracture of Both Bones of the Forearm.

Here is another fracture case. This boy applied to the hospital and had the limb dressed yesterday. It is a fracture of both bones of the forearm, resulting from falling down a hatchway. There is a great deal of effusion and ecchymosis at the seat of injury. When both bones of the forearm are broken we should adopt means that will keep the whole limb very still; and I think it better to keep the arm in the position of supination, as has been done in this case. If the radius alone is broken, I think it better to adopt the same position. If the ulna is broken the position is not so important. If we have a fracture of the radius, particularly of its upper extremity, the upper portion of the bone is supinated by the biceps muscle, which, as you know, is not only a flexor of the arm, but also, from the position of its insertion, a supinator. If there is solution of continuity of the upper part of the radius, the upper fragment will be supinated, and unless you supinate the lower fragment you will have union with an axial deformity, and consequently, when the bone has healed, there will be loss of the power of pronation and supination.

In case of fracture of both bones of the fore-

arm, a very important part of the treatment is to use such a splint as will prevent the two bones being brought close together. To a certain extent, this object is accomplished by the position of supination. We use in these fractures a splint a little wider than the forearm, so that the pressure of the roller may not press the bones together. You must not have them too wide, or the bones may become displaced. They are to be just wide enough to prevent the bandage from pressing against the sides of the arm. We use two splints; a palmar splint, extending from the bend of the elbow beyond the fingers, and a dorsal splint, extending from just below the tip of the olecranon to the wrist. There is no occasion for a long posterior splint.

In applying these splints I place a little cotton under the upper end of the anterior splint, to prevent pain. I also place a pad of oakum in the palm of the hand. We cannot very conveniently fix the elbow joint, except by supporting the hand in a sling, which answers very well. In bandaging always leave out the thumb; this gives the patient a great deal of comfort. You see that I do not apply any roller under the splint. This is the invariable rule in all fractures of the forearm. I do not know why it is, but most of the cases of gangrene from tight bandaging occur in the forearm. I have seen one case of gangrene from this cause. A young man had a simple fracture, I believe of the radius only. A physician dressed the limb and applied a tight bandage, and did not see the case for four or five days. On removing the bandage the whole forearm was in a state of gangrene. He was then admitted to the Episcopal Hospital, with which institution I was then connected as surgeon. The arm was amputated at the shoulder joint, but the patient finally died. If you do not apply a bandage under the splints, you cannot well cause too much pressure.

In addition to the bandage I apply two or three strips of adhesive plaster, to seal the dressing and prevent it being disturbed, either by accident or by the patient. The arm is then placed in a sling and the patient instructed to keep the hand constantly supinated. The length of time required for union varies, according to the age of the patient, from four to six weeks. In this case we can probably remove the splints and have the arm carried in a sling at the end of five weeks.

Fracture of the Neck of the Femur.

Here is another case of fracture of the thigh bone; but in this instance the neck is the seat of fracture. I shall not detain you very long with this case, as I wish to perform a little operation before the close of the hour. This patient has also received a fracture of the nose, involving the ascending branch of the superior maxilla. He has also received an extensive wound of the cheek. His injuries are the result of having been struck by a locomotive. As you look at his leg you observe the same symptoms as in the other case; but one symptom is much more marked, that is, the eversion. You remember I told you that when the neck of the bone was broken the eversion was much more marked than when the shaft was broken, as the whole weight of the limb is then allowed to act in turning the leg outward.

There was no shortening when the man was admitted, yesterday; but I suspect that we shall find some to-day, because, in fractures of the neck of the femur, the shortening is usually greater some time after the injury than immediately after it. This is due to the fact that some portions of the capsular ligament which had not at first given way do so afterward, and thus allow the limb to be drawn higher up. There is barely an inch of shortening.

There was another symptom well marked in this case; that was rotation of the trochanter in a smaller arc than natural. This is a mechanical necessity in fracture of the neck of the thigh bone. There is also depression of the trochanter. This is determined by comparing the three prominences, the anterior superior spinous process, the tuber ischii, and the trochanter.

In regard to the distinctions made in the books between inter- and extra-capsular fractures, I will say that it is a very difficult matter to distinguish between them. In the majority of cases the fracture is partly within and partly without the joint. A more practical division is that which has been made by Dr. Bigelow, of Boston; that is, into impacted and unimpacted fractures; for the treatment depends upon which kind of a fracture it is. If you have an impacted fracture, the shortening cannot be very great. You understand what I mean by an impacted fracture. It is one in which the ends are crushed together, as it were; the ends of the fragments become interlocked and are held together. If you were to make forcible movements, you would get rid of the impaction: but this is just the condition you desire to maintain. You must try to preserve the impaction, because in such cases you are more apt to get bony union. In such cases you will apply no weight at all, or else very light weight.

This is not an impacted fracture. We therefore need extension. We also need a certain amount of lateral support. The fracture being so high up there is not much tendency to outward bowing. We therefore substitute for the long splints, bags filled with sand. I put a pad of oakum under the heel and then pass the extending cord over the pulley. In order to diminish the tendency to eversion, I shall carry a loop of bandage around the foot and fasten it to the inner sand bag.

The time required for union is about the same as in fracture of the shaft; that is, from six to eight weeks. When the patient is allowed to get up it is not usually necessary to use any additional dressing, because there is no risk of consecutive shortening, and not so much risk of injury as in fracture of the shaft.

Tenotomy of the Tendo-Achillis and Plantar Fascia.

This little fellow is the victim of a disease of which we see a great many cases, that is, infantile paralysis. A form of nervous disease; a disease of the spinal cord, of which you have no doubt heard from Professor Wood. One result of this disease has been contraction of certain muscles, or as the fashion is now to call the condition, contracture. We have, on the right side, the heel drawn up and the sole of the foot turned inward, a variety of club foot known as

varus. If the heel is drawn up without inversion of the foot, the patient walking on his toes, we have talipes equinus, or horse's foot. If the deformity is in the opposite direction, the toes drawn up and the patient walking on his heel, we have talipes calcaneus. If the foot is turned outward, we have talipes valgus. Varus, the condition present in this case, is always accompanied with a certain amount of drawing up of the heel. Where the drawing up of the heel is exaggerated, the condition is termed equino varus.

What I propose to do here, is to try and straighten the foot. I shall divide the plantar fascia and the tendo-Achillis, which I think will be sufficient. I do not want to divide the tibial tendons, if I can avoid it, as in these paralytic cases tenotomy, though often necessary, must be considered a necessary evil.

I can turn the foot out pretty well, showing that there is not much contraction of the tibial tendons. I use a delicate knife or tenotome in performing this operation. In dividing the fascia, it is better to introduce the knife between the skin and the fascia, and cut downward. In dividing tendons, in most positions, it is better to pass the knife below the tendon and cut outward. I shall now divide the tendo-Achillis. Over these little punctures, I apply pieces of lint dipped in the compound tincture of benzoin and held in position by adhesive strips.

You see that now the foot can be brought into a respectable position. I now apply a flannel bandage to the leg, as it is more elastic than the ordinary bandage. Over this I apply a plaster bandage, making a few extra turns around the ankle joint. The foot will be held in this position until the plaster becomes hard, which will require about twenty minutes.

The patient will be kept in bed for a few days. In the course of a week or two we shall remove the plaster, and then I hope, by encouraging him to walk, for he still has some power in the muscles, to prevent, by the physiological use of the limb, any return of the deformity.

It may also be necessary, at some future time, to divide the ham-string tendons, but we shall do nothing further to-day.

Editorial Department.

Periscope.

Epithelioma of Leg.

In the London *Medical Times and Gazette*, Dec. 31st, 1881, Dr. Bloomfield, House Surgeon of the Devon and Exeter Hospital, reports an interesting case of epithelioma of leg in a young man—amputation below the knee—primary, and two attacks of secondary hemorrhage—subsequent recovery—under the care of Mr. Caird.

Nicholas S., aged thirty-six, was admitted into the hospital in May, 1881, with an excavated and apparently spreading ulceration, commencing over the internal malleolus, and running five inches up the right leg. He is a florid and healthy-looking man.

History.—He broke the right leg in its lower third when fourteen years of age; since then he says it has been somewhat crooked and smaller than the opposite limb.

History of Present Attack.—He had always enjoyed good health, and been able to get about in his work as a farm laborer, until twelve months ago, when he first noticed a small sore breaking out without any apparent cause (there is no history of any recent injury), about two inches above the internal malleolus. The ulcer spread somewhat rapidly, getting deeper, and was attended with a good deal of pain, but his general health had not suffered. His father died at the age of forty five, six months after having an epithelial cancer removed from the lower lip.

Present Condition.—Lately this ulcer has increased rapidly in size, and he feels weaker. There is an irregularly excavated ulceration, the lower edge of which corresponds to the right internal malleolus, extending up the limb five inches. Over the internal malleolus is an elevated, bright-red-colored mass, with edges slightly hardened, and on pressure discharging little masses of a yellow color, apparently epithelial *débris*. There has been occasional hemorrhage. The edges are not raised above the surrounding skin, except over the malleolus, in which direction the disease appears to tend to spread. The deepest part of the ulcer has, as its floor, the lower third of the shaft of the tibia, which is soft and necrosed, and evidently involved in the disease. It discharges a thin, puriform fluid. The femoral glands are enlarged, but he cannot say how long he has noticed this. Small portions of the growth were cut off, hardened in spirit, and examined microscopically by Mr. Bloomfield. The examination showed the growth to be well marked epithelioma, nests being very numerous and prominent in the sections examined. He was kept in bed, put on ordinary diet, and the wound dressed with carbolic oil. He appeared to be the better for the rest in bed; his appetite was good, and he complained very little of pain in the leg. The temperature before the operation was taken on several occasions, but was never above 99°.

On June 15th, Mr. Caird amputated the leg in its upper third. The bone appeared to be quite healthy at this point. No blood was lost during the operation, and after being left open for some hours the flaps were brought together with wire sutures, and the stump exposed to the air with a small piece of gauze over it. The evening temperature was 98.8°. At 10 P.M., hemorrhage (primary) came on; pressure failed to control it, and it was necessary to remove the sutures.

Several muscular branches were tied, and the bleeding ceased; the stump, however, was left open for ten hours, and then the flaps were brought together with silk sutures tied in a bow.

June 16th.—Temperature: morning 98.4,° evening 98.8°. Doing fairly well.

18th.—Free discharge of pus. Sleeps well, and does not complain of much pain.

20th.—Slight, but sharp, attack of secondary hemorrhage from the top flap at 8.15 A.M. Evening temperature 99.2°.

21st.—Violent secondary hemorrhage at 8.30 A.M. It was necessary to apply a tourniquet above, and again take out the sutures. The bleeding did not appear to come from any large vessel in particular, but depended on a general hemorrhage from the numerous vessels in the flaps and in the bone itself. Tinct. ferri. perchlorid. was applied. The flaps appeared congested and dark colored. A consultation of the surgical staff was held to-day as to the advisability or otherwise of secondary amputation. As it appeared, however, that amputation higher up would not probably do away with his tendency to hemorrhage, and seeing that, though there had been three attacks, on the first, sixth, and seventh days after the amputation, the hemorrhage had been brought rapidly under control, so that the actual amount of blood lost in the three attacks had not been so great as to reduce him to a desperate state, it was thought best for the patient to leave the flaps open and allow the wound to heal by granulation.

The subsequent history of the case may be briefly stated as follows: The sloughs formed on the surface of the flaps by the tincture of iron gradually separated, on one occasion being attended with some considerable hemorrhage, which was checked by applying a little more of the iron. The surfaces became gradually covered over by healthy granulations, from which there was an abundant discharge of healthy pus. His general health kept up remarkably well during the trying time through which he passed. In July a special splint was applied, and the limb kept suspended. During the next two months the flaps gradually contracted by granulations, and it was possible by pressure and strapping to bring the lower flap over the face of the amputation. Toward the end of September it had completely healed over; his general health was excellent; the glandular enlargement in the groin had disappeared; and he was discharged cured on September 29th.

Remarks.—The patient was of middle height, with dark hair and blue eyes; of florid complexion, there being two bright red patches on both cheeks. Medically, after the amputation, he was treated with large doses of steel and liquid extract of ergot. From the repeated hemorrhage, it is probable that there exists a hemorrhagic diathesis. The large glandular swelling in the groin, though it eventually disappeared, suggests the probability of some secondary deposit, and this led Mr. Caird to elect to amputate below the knee, because amputation above would have been attended by greater shock to the system, which might have so reduced his strength as to hasten return of the disease in the glands. The original disease no doubt began as an epitheliomatous ulceration of the skin, and by extension involved the shaft of the tibia, which was superficially softened and ulcerated. The glandular enlargement may possibly be accounted for partly by the irritation caused by the large extent of suppurating surface; at any rate, the removal of the limb has had a beneficial effect in causing the enlargement to disappear.

Amygdalotomy and Suicide.

In a recent issue of the London *Medical Times and Gazette*, Dr. R. B. Taylor, L.R.C.P., says: In the course of an interesting and instructive clinical lecture on Amygdalotomy, delivered a short time since by the well known operator, Dr. Rubio, at the Madrid Institution for Medical Practitioners, attention was drawn by the lecturer to the frequency of suicide in young persons subsequent to excision of tonsils. Four cases of the kind, which have come under the personal notice of Dr. Ambrose Rodriguez, one of the able professors of the institution, formed the subject matter of Dr. Rubio's theme; and I hardly need say that this novel subject has aroused a considerable degree of interest in medical circles and societies.

On broaching the question of relationship between amygdalotomy and suicidal mania—a relationship which will in all probability elicit a variety of conflicting opinions and hypotheses—Professor Rubio calls attention to the immature age of the four individuals whose cases are recorded, one of whom had just completed his fourteenth year. This tender age precluding, as it does, all idea of thwarted passions, financial losses, blemished honor, *tedium vitæ*, or other etiological factors which in more advanced years commonly play so important a part in the production of suicidal mania, Dr. Rubio offers another view of the cause of this peculiar mental aberration.

The Professor's point of departure is the remarkable property which every portion of the pharyngeal isthmus, and especially the uvula, possesses, of causing reflex action in many and distant organs. The slightest touch of the uvula excites contraction of the whole digestive apparatus, from the jaws and their muscles to the pylorus, diaphragm and sphincters, creating gastric spasm and sickness. The most insignificant inflammation of the pillars or of the soft palate interferes with deglutition to a degree out of all proportion to the swelling of the affected part, just as a trivial pharyngeal angina causes violent efforts at swallowing and simultaneous overaction of all the facial muscles, not excluding even those of the eyes and eyelids.

The supposed naso-pharyngeal obstructing and voice-modulating functions of the uvula having been disproved by modern research, and no other special physiological uses having as yet been assigned to this organ, Dr. Rubio, taking into consideration the sympathetic responses of the digestive and respiratory organs to the calls of the palatal appendage, regards it as *a centre of gastric and respiratory reflex actions.* Bearing in mind the fact that *the symptoms of disease in an organ of special reflex action are transmitted to every other organ with which they are physio-*

logically connected, it is easy to account for those most diverse and apparently anomalous morbid phenomena which, due to a simple elongation of the uvula, betray their presence in larynx, lungs, stomach, heart, and head. We can, on the same grounds, explain, as Dr. Rubio has so forcibly pointed out, why certain apparently insignificant pharyngeal irritations give rise to those strange, pseudo-hypochondriacal and pseudo-hysterical groups of symptoms which, as occurring in both sexes, he has denominated pharyngeal hypochondriasis and pharyngeal hysteria.

According to Dr. Rubio, these pharyngeal reflex diseases possess features to some extent similar to those present in persons suffering from fissure of the anus. Just on the same principle as the sufferings of these latter patients induce a state of terror and mental depression bordering upon hypochondriasis, so also a fissure of the pillars of the pharynx, caused by the nipping of a portion of the same during excision of the tonsils, inducing thereby a state of incessant irritation of the unhealed pharyngeal fissure, kept up by the act of deglutition and the contact of solid and liquid food, may influence the reflex action on the brain sufficiently to lead to perversion of the affective faculties, despondence, or anger, and ultimately to self-destruction.

Whatever may be the fate allotted to Dr. Rubio's ingenious theory, the relationship between amygdalotomy and suicide is, beyond doubt, a topic well worthy of careful and attentive consideration.

Drainage in Ruptured Uterus.

We learn from the London *Medical Times and Gazette* that two cases in which this usually fatal accident was successfully treated by drainage, are reported in a recent number of the *Centralblatt für Gynäkologie* (1880, No. 26). One is reported by Dr. Morsbach. The patient was aged thirty-five, and had had four children, the last five years previously. Labor came on at full term. When vigorous pains had lasted five hours, the midwife ruptured the membranes. After this the patient, who had till then been standing, felt herself obliged to lie down, and the pains ceased. Three powders, obtained from a chemist, were given to bring on pains, without effect. Ten hours after the rupture of the membranes Dr. Morsbach saw the patient. The os uteri was about eight centimeters in diameter, and the feet could be felt presenting, but high up. A dose of ergot was given, without effect. The patient was then narcotized, and it was discovered that there was a rupture of the vagina and cervix uteri, and that the child was in the abdominal cavity, except one foot, which was within the uterus. The foot was seized and the rent carefully enlarged by numerous small incisions with scissors, till it would allow the child to be extracted. The hand was then inserted, and the placenta, which was in the peritoneal cavity, was removed. Two thick caoutchouc drainage tubes were put into the rent, and a pad of salicyl wool between the thighs. Slight pyrexia followed, lasting a little more than a week, with abdominal tenderness and tympanites. One drainage tube was removed the next day, and the other on the fourth day. The patient got up on the fourteenth day. Fourteen weeks afterward she thought herself quite well. There was then a deep fissure in the cervix posteriorly, the bottom of which could not be reached by the finger, and a cicatrix in the posterior vaginal wall. Dr. Morsbach thought it possible that the midwife may have ruptured the uterus when she thought she was only rupturing the membranes, for she admitted that she had found great difficulty in doing what she did. The other case occurred in Berlin, and is reported by Dr. M. Graefe. The patient was in labor with her thirteenth child. The pains continued for six hours and then suddenly ceased. An hour afterwards she was found in a state of collapse, the face presenting, an arm down in front and a foot behind. Incomplete rupture of the uterus was diagnosed, and the patient was removed to the hospital. When she got there it was plain that the child was in the abdominal cavity, the contracted uterus being felt in front and to the left of it. The hand was introduced, a foot seized, and the child extracted; then the placenta was removed. The uterus was found ruptured transverely, only about three fingers' breadth of its wall remaining entire. The peritoneal cavity contained much clotted blood and meconium. It was washed out with a 2½ per cent. carbolic acid solution, and then a thick drainage tube, thirty centimeters long, put into the abdominal cavity and secured by a silk suture to the posterior commissure. A bandage was put round the abdomen, and on it an ice bladder. During the first two days the pulse was hardly perceptible. Hiccough and vomiting were troublesome during the first five days. The temperature did not rise till after the sixth day, when she began to have evening exacerbations of fever, which continued until the beginning of the fourth week, after which the temperature remained normal. After the sixth day the parts were irrigated from one to three times daily, through the tube, with a 2½ per cent. solution of carbolic acid. The tube was removed on the thirtieth day. The patient left, well, on the thirty-fifth day.

Frothing Urine and its Causes.

Dr. Kirk has an excellent study on this subject in the Glasgow *Medical Journal*, for October. He says:—

My observations have been chiefly confined to the urine, and especially to albuminous urine. It is evident that the spontaneous production of froth or air bubbles on the surface of any urine must depend on two causes: (1) a certain property of the liquid, and (2) the presence of gas in it. If any gas arise from decomposition, or air be introduced by agitation, these bubbles will form in proportion as the liquid possesses the property which gives rise to them. What class of urines most readily produce gases, or to what extent the production of such gases is to be regarded as pathological, I have not made the subject of observation; my attention has been solely directed to the degree in which various urines possess the property which enables these bubbles to form when a current of air of given amount is driven through them. Proceeding in this way I obtained the following results:—

1. Urine, whether normal or otherwise, is almost invariably frothy, so as to be easily distinguished from mere water by this peculiarity. This, indeed, any one may observe in the act of micturition.

2. The degree in which urine possesses the property on which this phenomena depends varies extremely in different cases, but it is never very great except in pathological urines. I have found it highest in—1. The majority of specimens of albuminous urine, but certainly *not in all.* 2. Certain high colored urines. 3. Some urines containing bile pigments, although in such cases it was not much above normal.

It was evident that the power of frothing depended on certain constituents, and the proportions in which they might be present. These constituents seemed to be, in healthy urine, the extractives (more especially, perhaps, creatinine). Not all the pigments, however, seemed to confer this property on the urine, for I have met with one specimen of a very high colored urine which gave scarcely any froth with the air current.

With regard to the plasticity of the fluid, he found:—

1. Serum albumen (equal quantities, as nearly as could be estimated, being compared) has greater plasticity than ovalbumen.

2. Fibrinogen, from hydrocele serum, and fibrinoplastin (serum globulin), from blood serum, have a high degree of plasticity, but I could not venture to say whether it is greater than that of serum albumen.

3. When albumen is transformed into acid or alkali albumen, or when the salt is removed from it by dialysis, the plasticity is at first not much affected, but in these cases it is sooner lost by keeping than otherwise.

4. When salt is added to an albuminous liquid the plasticity remains a long time. It also counteracts the effect of acid or alkali on the plasticity.

5. Any agent (as salt) which preserves the plasticity, also preserves the albumen longest from decomposition; or conversely.

True Ozæna.

M. Calmettes, in a recent number of *Le Progrès Médical* (October 8th), has made a critical study of the works and theories on the above subject. The study of this affection has entered on a new phase, through the labors of Zaufal, Michel, Hartmann, and Gottstein. The thesis of M. Martin, a memoir giving the result of two autopsies by Hermann Krause, and a large work by Cozzolino, giving a résumé of all the different opinions on the subject, are the latest additions to the literature of this disease.

The epithet "true ozæna" is used to distinguish this disease from those cases of simple nasal catarrh in which the mucus collected in the nostrils is in the morning somewhat fetid. Some cases of ozæna with notable fetidity are due to bone lesions, either syphilitic or traumatic. But in the great majority of cases, diathesic antecedents and bone lesions cannot be demonstrated, and such cases present such a uniformity of symptoms as to suggest the existence of one causation in all. They are generally observe at the period of puberty, and when met with i adults it will be found that the troubles date fro this period of life. Many explanations and the ories concerning this affection were put forwar before rhinoscopy was currently practiced. Sav vage, and recently Dr. Tillot, believed that i such cases there existed a stricture of the nas fossæ, which caused the retention and subsequen decomposition of the nasal secretions. Trou seau, who had remarked that children sufferin from this affection often enjoyed flourishin health, admitted a special fetidity of the secre tions analogous to bromhydrosis. But, unfor tunately for the patients, the general opinion wa that ulceration existed, and caustics were em ployed, with or without irrigations.

The patients say that the nasal secretions ar not liquid; that every second or third day the with difficulty expel from the nostrils large masse of hardened, greenish muccsities, of exceedingl fetid odor. They suffer from cephalalgia, and slee sometimes with the mouth open the night precedin the expulsion of these masses. Generally ther is no sign of scrofula, no anterior nasal affection and rarely auricular complications, accord ing to Michel, contrary to the opinion of Zaufal The anatomical peculiarity in these cases ha been shown by Zaufal to consist in the grea width of the nasal fossæ, due to an exceedingl small lower turbinated bone, which can sometime with great difficulty be distinguished; the middl turbinated bone is often of normal dimensions and the mucous membrane which covers it i smooth, red, and sometimes granular, but withou any trace of ulceration; this is demonstrated in th five autopsies of true ozæna which have been pub lished. Before the nose is irrigated there i such an abundance of crusts in the nostrils tha their abnormal width is not evident, and there seems to exist a number of grayish ulcerations

In accordance with the anatomical abnormali ties found, Zaufal considers that the disease i due to the extreme width of the nasal fossæ which permits the stagnation of mucosities and their decomposition, as they are constantly exposed to a current of hot and humid air; this renders the secretion fetid. Michel consider that this is not sufficient to explain the extreme fetidity, and considers the sphenoidal and eth moidal tissues must be affected. Gottstein hold that histological investigation proves the exist ence of a catarrhal state of the mucous mem brane, with atrophy and partial disappearance o its glands. These theories, with the exception of that of Zaufal, which seems the best founded, are not in concordance with symptoms observed in the majority of cases. The treatment indi cated by the nature of the disease gives excellent results. After a few irrigations with a solution of chlorate of potash, Gottstein advises a tampon of cotton wool to be placed in one of the nasal fossæ; this tampon, occupying the place of the absent inferior turbinated bone, narrows the nos tril sufficiently to enable the patient to expel the mucous secretions in a liquid form, before they have acquired any odor. The tampon, soon covered with adherent mucosities, is expelled spontaneously on the second or third day. The effect of this measure is so assured that it is not

solutely necessary to remove the dried crusts by eliminary irrigation. Gottstein is of opinion at this application irritates slightly the atro- ied mucous membrane and induces a more rmal secretion; but this explanation appears, say the least, insufficient, as the tampon is ap- ied on one side only. This treatment seems prove very effectual, and is even used by M. ournier, who considers the disease due to a tid secretion (exhalaison) from the glands the nasal mucous membrane.

---

70 Cases of Peritonitis Apparently Due to Diphtheria.

Dr. William C. Dabney, of Charlottesville, a., writes to the *American Journal of Medical iences*, for October, 1881:—

In the months of December and January last ere occurred in a large female school in this cinity an epidemic of measles. The cases were, learned from the attending physician, Dr. Bow- ck, generally mild, and all, so far as I know, rminated in recovery.

Following on the heels of the measles there curred an outbreak of diphtheria, which, with e exception of two cases, was so mild in char- ter that the disease was not at first recognized, id Dr. Bowcock was not called in.

No cause could be found for the outbreak. It ay safely be affirmed that no institution in the ountry is better managed, and nowhere is more tention paid to the hygienic surroundings of e pupils.

Case 1.—About the 10th of January, Miss M., ne of the teachers, about 26 years old, was taken ith quite a severe sore throat, but as there was o diphtheria, so far as known, in this section the time, no apprehension was felt. She was uch better in a few days, and about the 15th er monthly sickness came on. This ceased on e 20th, and on the 22d she came to Charlotts- lle, a distance of six miles, on the train, and as very busy all day. She returned on the after- oon train, much fatigued, and when she reached ome she complained of "cramps" in her abdo- en, but ate a hearty supper. In the night she ffered so much that she took some laudanum, nd the next morning was well enough to be at reakfast.

During the day of the 23d she complained a ood deal of pain, but Dr. Bowcock did not see er till the 24th, when he found her with con- derable fever, marked tenderness in the lower art of the abdomen, a quick and rather weak ulse, and great nausea. Appropriate remedies ere administered, and that night she seemed etter, but the following day, January 25th, he ound her with an extremely weak pulse and in state of collapse. I saw her, at Dr. Bowcock's equest, about 3 o'clock on the afternoon of the 5th, and found her in a state of extreme pros- ration, pulse almost imperceptible; there was reat restlessness and tenderness over the whole bdomen. She sank rapidly and died at 5 o'clock ne same evening, consciousne s being pre- erved almost to the last.

We were strongly inclined to attribute the peri- onitis in this case to diphtheria, though neither f us had seen or heard of such a case before, nor had Dr. J. S. Davis, of the University of Virginia, who was kind enough to come to our assistance, but who reached the house only a little while before the young lady's death.

Case 2.—On the 5th of February following, I was called by Dr. Bowcock to see Miss O., one of the pupils in the school. She was suffering with diphtheria, and there was marked tender- ness and pain in the abdomen, especially about the lower part. Her pulse was very feeble, and her temperature high (I cannot recall the exact figure). Full doses of opium were administered and hot applications made to the abdomen.

Dr. Davis was kind enough to see this case with us the next day, and he agreed with us in the diagnosis, and gave, as we had done, an un- favorable prognosis. She threw up, on the 6th, a good deal of false membrane, and we were in- formed by one of those in attendance on her that she had passed membrane by the bowels also. The case ran a very similar course to the previ- ous one, and the young lady died on February 7th.

The occurrence of peritonitis as a sequel or complication of diphtheria seems to be extremely rare, if we may judge from the fact that it is alluded to by very few writers on the subject.

High Local Temperatures.

Dr. William Squire contributes the following interesting information to the London *Lancet*:—

A long attention to surface thermometry, while revealing numerous sources of error, such as un- due or unequal warming or covering of the part to be examined, shows some very real and im- portant differences; these deserve careful note, and will some day admit of useful generaliza- tions. As a provisional deduction, it may be stated that these natural variations seldom ex- ceed by as much as 4° or 5° that of a correspond- ing part of the surface, and are still more rarely even a degree above the internal or general temperature of the body. How largely the re- verse of this may be possible is well known. Collapse may set in from an intense fever at its height, and the limbs be algide while the head and body burn. During scarlet fever the tempe- rature *in recto* has been 105°; and at the same time only 97° in the skin of the abdomen or in its folds. In the axilla an accurate surface ther- mometer has marked 103° on the thoracic side and only 98° on its brachial aspect; this was found in acute pulmonary congestion near the close of chronic lung disease. In right hemi- plegia of two months' standing the paralyzed arm and the left side of the face were two and three degrees higher than the parts unaffected; the surface temperature of the head over the side corresponding to the supposed seat of cerebral lesion being 1½° lower than the opposite side. From some obscure affection of the cervical sympathetic, probably, an active man thirty years old has a persistent flush on the left side of the face. This is worse when he is heated; on any little exertion or excitement that side of the face and forehead are bedewed with perspiration; the temperature, while he is at rest in a cool room, is 4° higher on the left temple than on the right; it was 90° on the right and 94° on the left temple

in the morning of a cold day. A difference of a half a degree is frequently found on the two sides of the forehead. The range in health at various times of the day and under varying conditions is usually from 92° to 96°, but the difference between the two sides is seldom as much as half a degree, and the left temple is rather more often the higher than the right. There are some conditions of hemi-anæsthesia and hyperæsthesia where the symptoms more or less suddenly change from side to side, that have a like curious variation in temperature. These cases have a variation of only two or three degrees, and are not limited to hysterical subjects. A temperate man near the age of forty had to lay up for three weeks, for pyelitis and renal irritation, with severe headache, chiefly on the left side; in early convalescence, with normal temperature *in ore* the right temple was 96.4°, the left 94°, and it was noted as curious that the temperature of the right axilla was only 97.6°, while the left was 98.2°. The following week, during a relapse, the temperature at noon *in ore* was 100.6°, that of the right axilla 101.6°, of the left 100.3, both temples close on 98°. At night the general temperature was 101°. His temperature on the next day at noon was 98.6° *in ore*, 98.8° *in recto*, right axilla 98.2°, left 97.4°, right temple 94°, left temple 94.5°. Urine pale, sp. gr. 1.016, slightly turbid, mucous deposit, a trace of albumen. Pulse 80, respiration 18. Before recovery was complete headaches with loss of sleep recurred, with shifting of the increase of temperature from the right axilla and right side of the trunk to the left side, and of the higher head temperature from the left to the right, and *vice versâ*, more than once.

Bromine Topically in Chancroids and Chronic Ulcers.

Dr. J. L. Robinson, of Louisville, Kentucky, writes, in the *American Practitioner*, for November, 1881:—

Within the past few months I have had opportunity of testing bromine as a local application to chancroids and chronic ulcers, associated with syphilis, as seen in the United States Marine Hospital in this city. The following is the formula used:—

R. Bromine, one part; water, three parts; bromide of potash, q. s. to make a solution. To be applied once daily by means of a mop made of cotton wool.

I subjoin a very brief report of a few of the cases treated:—

Case 1.—W. C., colored, chronic ulcer of two years' standing over the anterior middle third of the tibia. First seen April 1st, when the granulations were large, flabby, and raised, and the surrounding tissues excessively indurated. Applications of nitrate of silver and sulphate of copper were used daily for nearly a month without effecting any change in the character of the sore. May 1st, I applied the bromine solution and continued it daily. Each application was followed by oakum to the sore and a flannel roller to the limb. In two weeks the granulations came to a level with the surface and were of healthy aspect, the surrounding integuments grew soft and pliant, and cicatrization set in. Some weeks after the ulcer was reduced half its form size, and healed rapidly.

Case 2.—C. H., colored, admitted June 30t having a large ulcer of six months' standin situated as in Case 1, and altogether of simil character. The bromine, oakum, and the roll were at once applied. Improvement was notic able from the first day, and speedy cure seer assured.

Case 3.—S. H., white, admitted July 12t with an ulcer of both legs, just above the intern malleoli. Much the same appearance as in cas just described. The same treatment effect almost at once the most striking change, and four weeks the patient was discharged cured.

Case 4.—A. L., colored, admitted July 2 ulcer four square inches in size, of six montl standing, situated just above the ankle on t inner side of the right leg, cup-shaped, cover with a greenish slough, and made offensive by fetid, ichorous discharge. The bromine, e quickly reduced the ulcer two-thirds in size, t sides converting it in all respects into a healt sore, which gives promise of uninterrupted a quick cure.

Case 5.—J. L., white, admitted August 2d, w a large, indolent ulcer of two years' standing i mediately above the external malleolus of rig leg. Numerous smaller ulcers existed in t region of both ankles. Bromine, oakum, a the flannel roller accomplished much the sa results as in the previous cases.

Fifteen grain doses of the iodide of potassiu given three times daily, made up the consti tional treatment in the foregoing cases, except Case 1, where cod-liver oil was deemed advisab

I have also used the bromine in several ca where, after the operation of circumcision, oculation of the entire raw surface had occurr with equally good, I might even say with bet results than in the leg ulcers.

Alcohol in Therapeutics.

In a communication on this subject, to *Medical Record*, Dr. Lewis D. Mason, of F Hamilton, N. Y., says that the medical offic of the Inebriates' Home, at Fort Hamilton, ha within the past two years, adopted the plan s gested by Dr. Benjamin W. Richardson, of p scribing pure alcohol instead of wine, beer, whisky, whenever, in the treatment of vari forms of alcoholism, the use of alcohol was in cated, and have found the following benefits proceed therefrom:—

1st. The satisfaction of having a solution c taining a definite percentage of alcohol, thus p viding an exact system of dosage.

2d. A very marked saving, and therefore method of value from an economical point alo especially in those institutions where the liq bill is a large item of expense.

3d. The moral effect on the patient, in cc pelling him to at once break off his accustom stimulant, and providing a "medicine" as efficient substitute.

4th. The advantage which the alcohol has o brandy, whisky, etc., is that, owing to accur and concentration of the dosage, the patient c valesces in one-half the time and with less fering.

Another advantage which this method of prescribing alcohol possesses is the lesson which the community will receive, in a quiet way, that the proper place for alcohol in any of its forms or combinations is the shelf of the pharmacist. Moreover, in a properly compounded prescription containing alcohol, the physician will have much greater control of the future physical and moral welfare of his patient, than if he directed him simply to take alcohol as contained in one of the various forms of liquor in common use. The alcohol should always be disguised by the addition of the various carminatives or bitter tonics, and also colored by caramel, so that the patient may not be unnecessarily informed as to what he is taking.

Hemorrhage due to Foreign Growth.

Dr. W. H. Lewis, of Graysonville, Mo , sends the following report of a case to the Louisville *Medical Journal*, for December, 1881:—

About a week ago I was called in haste to see Mrs. B., who had been suffering for several days from what she took to be painful menstruation. I found patient looking very pale and flooding profusely. Her clothing and the bedding were saturated with blood. I called for warm water, and while waiting for it, I removed the pillows from her head and elevated her hips instead. On making a digital examination I found the os dilated and bright arterial blood flowing from the uterus. Cold cloths were applied to the abdomen and warm water injected every half hour. Soon the hemorrhage was under comparative control. I also gave several large doses of fluid extract of ergot and stimulants freely.

As she still continued to have considerable hemorrhage, I made repeated efforts to introduce my hand into the uterus, and succeeded in introducing two fingers, when I found attached to the uterine walls a fleshy lump about the size of a hen's egg. After repeated efforts I succeeded in detaching this and removing it, when the hemorrhage ceased entirely and did not return. Under tonics and liberal nourishment she is now doing well.

Infectiousness of Blood and Urine of Tuberculous Animals.

The Glasgow *Medical Journal* for January, 1882, makes the following interesting report of some experiments on this subject, by V. Lentz, of Griefswald:—

In six rabbits he injected fresh blood of tuberculous rabbits into the lungs through a tracheotomy incision. In all of these, killed in from 92 to 216 days afterwards, he found miliary tubercles in the lungs, and in four of them in the liver as well. In one he found caseous masses in the lungs.

In all of four in which the blood was injected subcutaneously (killed after from 125 to 148 days) he found miliary tubercles in the lungs, and in two of them in the liver as well.

In one the blood was injected into the joint and adjoining connective tissue. The knee became swollen by the third day; on the 18th the animal died, and dissection showed stinking caseous suppuration in the joint, and tubercles in the lungs.

Two rabbits were subjected daily, for 71 days, to an atmosphere charged with steam containing from 30 to 40 ccm. of freshly voided urine from tuberculous animals. After death the lungs were found full of minute sub-pleural ecchymoses and numerous peri-bronchial tubercles.

With three others "phthisical urine, which had been allowed to stand for several days in a warm room, was used. One died on the ninth day, after aborting, and examination showed in the peri-bronchial connective tissues numerous masses of round, well defined nucleated cells, "undoubtedly commencing tubercles." In the others (killed on the 48th and 60th days), tubercles, less numerous, but more uniform in nature and position than in the rabbit treated with fresh urine, were found.

In all the sections of tissue examined, a decided thickening of the arterial coats was observed.

Joints from a Case of Gout.

At a recent meeting of the Pathological Society of London, Dr. Norman Moore showed the knee, larynx, kidneys, and brain of a man who died a few hours after admission into hospital. The patient had had repeated attacks of gout. A deposit of urate of soda was found in various joints, but not in the vertebral joints; the amount of deposit in the knee joints was very remarkable; and in the right knee joint a quantity of purulent fluid was found. The kidneys were in an advanced stage of interstitial nephritis. On the left side of the cerebellar hemisphere there was a white plate in the pia mater. This plate contained a trace of uric acid. The bony tissue of the tibia contained no uric acid. No trace of lead could be found in the liver; lead, Dr. Moore observed, probably merely tended to produce gout by checking excretion, and not by any more direct action. Dr. Dyce Duckworth observed that the relation between gout and lead poisoning was a very certain and very interesting one. He thought this an interesting case, inasmuch as it was clearly shown that suppuration had occurred in one knee joint. This was a very rare condition; in some of the other cases on record the patients had suffered from erysipelas; but in this case there was no history of erysipelas, and therefore it might be regarded as a true case of suppuration in a gouty joint. Dr. Curnow said that two years ago he had examined a body in which nearly every joint of the lower limbs contained urate of soda; but in this case there was no suppuration. The vertebral joints and the joints of the upper limbs escaped. He thought that any suppuration which occurred in gouty joints was an accidental complication.

Medicine in Japan.

According to a recent return, Japan possesses 159 hospitals, in which the patients are treated on principles recognized by Western nations. Vaccination is performed gratuitously, and is compulsory. Moreover, a sort of Medical Act has been lately passed, by which persons without certificates are prohibited from practicing medicine or surgery.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,

115 South Seventh Street,

PHILADELPHIA, PA.

STEAMER SURGEONS.

The English journals are just now discussing the position of surgeons on steamships and sailing vessels. It seems that their position is, indeed, a very anomalous one. They are poorly paid, their authority is very limited, and their duties ill defined. This is, in reality, a much more serious question than would at first thought appear. Americans, as great travelers, are much interested in this subject, and a few thoughts pertaining to it will, indeed, be of interest and importance to them.

What sensible person would take up his residence in any locality without first inquiring whether a competent physician was near at hand. It would be, justly, a very essential consideration. How is it on the ocean steamers, plying between America and Europe? The surgeon of a trans-Atlantic steamship is usually regarded as a very ordinary physician. Why? Because the pay is so little that it is impossible for the companies to secure the services of gentlemen whose acquirements are sufficient to procure them lucrative practice on shore. What are the results of this state of affairs? Few tourists stop to realize them. A man takes his family on board a steamship bound for Liverpool, and no matter what medical emergencies may arise, no matter how sick any of them may become, for the space of ten days or two weeks the only medical attendance they can possibly receive is that furnished by the ship's surgeon. If he be competent, so much the better; if he be not, then the poor patients *must* suffer the consequences, since it is utterly impossible for them to change doctors, unless, perchance (which rarely occurs in proportion to the number of trans-Atlantic voyagers), some capable physician happens to be among the passengers.

Suppose on a stormy day, one of the passengers falls on deck, or is thrown down stairs and breaks his leg; and suppose the physician of the ship is not a good surgeon; life deformity may result. Suppose a man has hernia, and during the voyage it becomes strangulated; if a good surgeon is not at hand, he must die. We could suppose a hundred surgical emergencies that might and do arise during an ocean voyage, requiring immediate application of accurate knowledge, with death as the alternative of lack of this familiarity with surgical science. The position of surgeon on an ocean steamer is by far the most responsible position in which a physician can be placed. When, on shore, and particularly in a large city, a physician is called to a case beyond his compass, he has a large number of medical brethren from whom to select one more competent than himself. How different at sea, when single handed and alone the ship's surgeon must be prepared to intelligently master any emergency that may arise, without one word of advice, encouragement or counsel, and without any division of responsibility. Truly, indeed, may his position become a trying one, such a one as to tax the ability of the greatest and most experienced of surgeons. How, then, can it be reasonably expected that such a responsible position can be capably filled for the paltry sum of seven or eight hundred dollars. We would

sk any of our rich and aristocratic European urists whether they would trust the lives of ieir wives, their children, or themselves in the ands of a physician whose abilities were of ich a calibre as to command a practice of only even hundred dollars a year. Yet, whenever ney cross the ocean, they not only do trust to uch medical ability, but they do so absolutely nd without the possibility of calling in one more ompetent.

How, then, can this state of affairs be remedied? By the establishment of a thoroughly efficient, graded merchant medical service, based upon the plan in vogue in the navy. Each steamship company should have its well paid medical superintendent, and each vessel should have *two* well paid medical men. With a salary of three thousand dollars for the surgeon, and two thousand for the assistant surgeon, such talent and experience could be secured as would render the lives of ocean voyagers reasonably secure, and would assure them of proper medical attendance.

The additional cost to the steamship lines would be comparatively small, and when viewed in the light of duty and justice to passengers, would be money well spent. The company inaugurating such a plan would find their passenger traffic more than they could accommodate, as soon as their reform became known. Such remuneration would induce capable men to apply for the positions, while an initiatory, followed by periodical examinations (uninfluenced by favoritism) would keep the service thoroughly efficient.

THE NATURE OF THE CAUSES OF DISEASE.

It is very discouraging, when we consider the great antiquity of the art of medicine, to realize how little accurate knowledge we possess of the intimate nature of the causes of disease, and how diverse are the views of eminent men on this subject, thus demonstrating by this very diversity how uncertain and untenable are the views held by each.

A remarkable illustration of this is afforded by the result of recent investigations into the nature of the specific poison capable of producing periodic fever. TOMMASI-CRUDELLI makes some elaborate investigations and experiments, and announces to the world that he has at last discovered the true nature of this poisonous germ. Dr. STERNBERG is ordered to investigate his experiments, and as a result comes out with a flat denial of the Italian's conclusions. Now who are we to believe, and what shall we accept. After many months of hard labor abroad and at home, we are left in as much doubt and know as little as we did before. Must it not be discouraging to CRUDELLI to have his conclusions emphatically denied, before they have hardly been made public. Still it is proper that this should be, since error must always be at once corrected.

Again, a writer treating of the Japanese disease, *Kakki*, says, "It is the opinion of those who have studied the disease that it is caused by a specific poison. Dr. D. B. SIMMONS, of Yokohama, whose residence of over twenty years in Japan, and familiarity with the disease in all its phases, entitle his opinion to the highest respect, believes that its cause is "*a specific miasm, or soil exhalation, like paludal malaria.*" Overcrowding, bad drainage and bad ventilation seem to develop the poison in systems debilitated by these or other causes, as sedentary occupations, labor, low diet, or non-assimilation of food; while non-acclimatization, occupation, diet, season and sex, seem to be the principal predisposing causes." Truly a comprehensive etiology, one whose very extent argues its uncertainty.

So it is with the most prevalent and most fatal diseases. Diphtheria is a remarkable illustration; smallpox, yellow fever, and cholera are the same. It may be argued that we do know the nature of the cause of these latter diseases, since we know that they are produced by contagion. But we do not understand the nature of the element which is the active agent in this contagion. We do know how to avoid smallpox, yellow fever, and cholera. We know how to escape from a malarious atmosphere, and how to alter such a locality into a harmless and healthy place of residence. Does it not seem likely that we never will be able to thoroughly understand

this minute etiology of disease. Will it not forever elude our grasp? Is there not a limit to human penetration, and is not this knowledge only to be found in the space outside of this limit? Some will say, yes; some, no. Let those who desire to so amuse themselves go on in their studies; if they ever reach any definite conclusions, which we doubt while we pray for, the world will be greatly benefited by their studies.

In the meantime the majority of physicians should be practically utilizing that prophylactic knowledge which we do possess. It should be their first duty to warn their neighbors against the causes of disease existing in their vicinity; and their second duty to endeavor to cure such disease, when contracted in spite of their caution. An ounce of prevention is worth many pounds of cure, and it becomes the conscientious duty of every respectable physician to utilize this preventive power.

Notes and Comments.

Post-mortem Contagiousness of Diphtheria.

Dr. G. S. Gerrard writes to the London *Lancet*, detailing a case which tends to substantiate the idea that a person may catch diphtheria from one dead of the disease. Two young persons were engaged to be married. The man was seized with diphtheria and died. The body was removed, for interment, to the town in which the girl lived. The coffin was opened, and no doubt the girl kissed her lover. Three days afterward she was seized with diphtheria. There were no other cases in the vicinity, neither had a severe case been known there for nineteen years, and its production could only be traced to contagion from the dead body. This circumstance gives us a hint as to the handling of those dead from this disease.

Transient Mania from a Bed-Bug in the Ear.

Dr. A. B. Kibbe reports, in the *Rocky Mountain Medical Times*, a curious case which well illustrates the power of imagination. He was consulted by a woman, sixty three years of age, who said she had been awakened early in the morning by a bed-bug crawling into her ear. Examination revealed a minute black speck directly in the centre of the membrana tympani. The ear was filled with glycerine, and upon subsequent inspection the object had disappeared, and she felt much better. A pellet of cotton was placed in the ear. Four hours later he was called to see her, being told that she was "crazy." She was found crouching in a corner, almost nude, screaming and beating the floor with her hands. In about an hour she became quiet enough to say that she had pushed the pellet of cotton into her head, and begged for its removal. An examination afforded an unobstructed view of the drumhead. A friend slipped a small wad of cotton into his hand as he withdrew the speculum. Upon seeing the cotton (the supposed presence of which in her head had been the cause of her mania), she experienced immediate and complete relief.

Treatment of Acute Articular Rheumatism.

We read in the *Concours Médical* (*No.* 48), that Dr. Carpani, having made numerous observations, and studied the best authorities on the subject, has divided the different methods of treating this affection into the following four groups, each with special indications:—

1st. Salicylate of soda is useful in cases of acute febrile polyarthritis, attended by highly localized articular manifestations. It is contraindicated by the concomitance of cardiac affections, nervous troubles, or gastro-intestinal or renal difficulties.

2d. Bisulphate of quinine is indicated in cases where rheumatism is a manifestation of, or associated with, malarial infection.

3d. Benzoic acid should only be used when nephritis is a complication of acute articular rheumatism, attended by fevers.

4th. Blisters (Dechilli's and Davies' method) are the most reliable agents for curing monoarticular rheumatism, or that form in which but few articulations are interested.

Papaïne in Diphtheritic Conjunctivitis.

Messrs. Bouchut and Hubert have lately met with quite a number of cases of diphtheritic conjunctivitis in the Hôpital des Enfants Malades. They have treated this hitherto somewhat rare disease with applications of papaïne dissolved in distilled water:—

℞. Papaïne, 2 grams = (ʒ ss).
Distilled water, 8 " = (fʒ ij). M.

and the children have all been cured. Quite lately another child suffering from this species of diphtheritis was similarly treated and recovered in three days' time.

Intestinal Invagination.

The *Concours Médical* reports a case of intestinal invagination, observed by Dr. Grosoli, which terminated in a very surprising manner.

A child, ten years old, had eaten oranges and lemons, swallowing skin and seeds, as is often done in the south of France. He was taken with violent pains, and vomiting soon set in. Castor oil, and other purgatives, injections, leeches, hypodermics of atropine and morphine, hot and cold applications, electricity, all were without effect. The symptoms grew daily more serious; vomiting became fetid and stercoraceous, and the abdomen extremely painful to the touch. The little patient had thus laid for twelve days, agonizing, and only sustained by nutrient injections, when Dr. Grosoli conceived the idea of administering 30 grams = (ʒviiss) of mercury. Two hours after this had been taken there was an expulsion of gases and fæces mixed with blood and mercury. This passage brought on some relief, but the pains only ceased on the evacuation of a membrane having a strong gangrenous smell. On the following day the patient passed a piece of the lesser intestines 40 centimeters = (15.7 inches) long, and for a period of fourteen days he continued having slight pains in the abdomen, and at intervals passing fragments of intestine. The case progressed most satisfactorily, and at the end of a month the child was entirely cured.

Bacteria as a Cause of Leprosy.

From the London *Medical Times and Gazette*, we note that Dr. Cornil arrives at the following conclusions concerning the seat of bacteria in leprosy and the lesions of organs in this disease. The tissues which he examined were so filled with bacteria, and so modified, that it was difficult even to determine what organ he was dealing with. The lesions in their direct relation to the bacteria were divisible into two series.

1. The leprous tubercles and infiltrations are characterized by large cells in colossal numbers, which infiltrate the diseased tissues and are filled with minute bacteria. When the leprous infiltration attacks a soft organ, like the liver, or one possessing natural cavities, like the testes, the bacteria become very voluminous. 2. In most of the fibrous tissues the bacteria throw out long filaments in the interstices of the fibres, the fixed cells of the fibrous tissue being little changed or normal. Sclerosis or thickening of the fibrous tissue, however, often resulting in leprosy. The disease seems, beyond doubt, to be caused by the bacteria.

Curious Case of Aneurism.

Dr. J. A. Temple reports a singular case of popliteal aneurism, in the Canada *Lancet* for January, 1882. The aneurism was first treated by digital compression, which was persistently maintained for thirty-two hours, at the end of which time both pulsation and bruit had disappeared, and remained absent for four days. Gradually, however, they both returned, with swelling, which extended upward on the thigh. Operative interference was refused, gangrene supervened, and the patient died. The post-mortem revealed a spiculated outgrowth of bone from the posterior and upper part of the inner condyle of the femur, measuring one and a half inches in length, and terminating in a sharp point. This point had penetrated the sac, and was, most likely, the primary cause of the aneurism, by injuring the coats of the artery. The patient was only twenty-four years old.

Smallpox and the Paper Makers.

The *Sanitary Engineer* says: Among the many modes of spread of smallpox, that by means of rags merits special attention. That the danger is by no means an imaginary one, is shown by the experience of Holyoke, where several cases of, and deaths from, this disease have occurred. That all rags should be thoroughly disinfected by heat, chlorine or sulphurous acid gas, or by a combination of these methods, before they are given to the sorters, and that all employés in paper mills should be vaccinated, are simple common sense suggestions which should commend themselves to the owners and managers of such establishments, and which health authorities should use their influence to secure.

Physicians living in the neighborhood of mills should make it their duty to call the attention of manufacturers to this danger.

Antiseptic Properties of Essence of Wintergreen.

We see in the *Concours Médical*, that Professor Gosselin and Dr. Bergeron have experimented with oil or essence of gaultheria (*gaultheria procumbens*), wintergreen, and have obtained good results from it, as an antiseptic in the dressing of sores.

Essence of wintergreen is much used in perfumery; it has an agreeable odor, and is insoluble in water, but soluble in alcohol.

Two solutions are used by Prof. Gosselin:—

No. 1.	Oil gaultheria,	fʒ i½
	Alcohol 60°,	fʒ xiiss
and No. 2.	Oil gaultheria,	fʒ ⅝
	Alcohol,	fʒ iij–fʒ j
	Water,	fʒ xiis

Special Reports.

No. III—INFECTIOUS DISEASES.

So much additional light has recently been thrown upon the nature and treatment of contagious or infectious diseases, that a special report on this subject will be interesting. It is in the field of medicine to which infectious diseases belong that we must necessarily look for the greatest strides in preventive medicine. When we succeed (if we ever do) in acquiring an intimate acquaintance with the active causative agent of these diseases, and when we know how to render abortive and powerless this agent or these agencies, then, indeed, will preventive medicine rank, as it justly should and surely will, as the highest branch of our great science. Many great men are now actively engaged in endeavoring to unravel the mystery of causation, and much good work has been done in this direction, which gives abundant promise that great success will crown their efforts in the future. Among these earnest laborers in this interesting field we may make mention of such well known names as Pasteur, Touissant, Koch, Klebs, Tommasi-Crudelli, and Lister, in the Old, with those of Sternberg and Wood, in the New World. Such names guarantee earnest and conscientious work, and are full of promise of success.

We will take up the principal contagious diseases in order (commencing with diphtheria), and will concisely state the most recent views and facts concerning their etiology, pathology, diagnosis and treatment. Smallpox will be treated in a separate report.

Diphtheria.

Its Etiology.—In his "Practice of Medicine," published in 1868, Flint seems to have very vague and indefinite ideas concerning the causation of diphtheria, as evidenced by the fact that his remarks on its etiology are confined to asking the question, "Is the special cause a contagious virus or an infectious miasm?" After which, for a few lines only, he discusses the question of its contagiousness or communicability, and concludes by regarding the question as *sub judice*.

Since that period much labor and time have been expended in endeavoring to penetrate the mysterious cause of this disease, and while we do not yet certainly know its nature, still we have made progress, and know more to-day than he did then.

As far back as 1858, Professor Laycock, of Edinburgh, advanced the theory, in the London *Lancet*, that the exudation of diphtheria was due to the *oïdium albicans*, or potato fungus, in support of which theory it was stated that Grubsy, of Paris, in 1844, had shown by the microscope that in pseudo-diphtheria, or muguet, and in thrush, the buccal pellicles displayed the tubular filaments and mycelium of a vegetable form analagous to oïdium. At the time, this theory was not generally accepted, since the microscope failed to furnish sufficient evidence of the presence of vegetable growths in the false membrane. But in 1880, the eminent English fungologist, Rev. John E. Vize, M.A., published a paper, in which he strongly maintained the dependence of diphtheria on an oïdium.

More recent investigations tend to show that diphtheria is an infiltration of living tissue with micrococci, and that their development is intimately associated with the morbid process. From an address of Dr. Michael W. Taylor, of Penrith, published in the *British Medical Journal*, July 2d, 1881, it would seem that the pseudo-membrane consists of layers of stratified epithelium, more or less mingled with products of exudation from blood plasma and some micrococci, while in the submucous tissue the channels communicating with the lymphatics are filled with micrococci, or masses of vegetation. This would seem to encourage the belief that the disease is due to the development and active life of vegetable matter within the body. The most recent investigations on this subject have been made by Professor H. C. Wood and Dr. Henry F. Formad, of Philadelphia. They were conducted at the suggestion and under the auspices of the National Board of Health. After many experiments, they have reached the conclusion that *micrococci* are the *fons et origo mali* of diphtheria.

Thus much, therefore, we know, and no more. It is truly little enough, but it gives promise of more in the future. We know that diphtheria is caused by a parasitic vegetable growth in the body. The most valuable research now in order will be to endeavor to discover some agent capable of destroying the vitality of this growth, from which we may be able to devise some means of preventing the disease. Medical journalism contains many discussions as to the origin of the micrococci of diphtheria. Some maintaining the doctrine that they are produced as a direct result of vegetable decomposition, while others stoutly deny this proposition. Whether they are or not is of but little real practical value as long as they exist. When a man breaks his leg a sensible surgeon will set it first and inquire how it happened afterwards. So it will be better for ex-

perimenters and investigators to devise first some effectual means of destroying the vegetable parasite and subsequently determine its origin. In connection with the etiology, we may state that the weight of evidence is in favor of the doctrine that diphtheria is a blood, or systemic, or constitutional disease, and is contagious. We may also allude to the fact that some observers have endeavored to establish an identity between croup and diphtheria. The weight of evidence is also against this affinity, and justly so, since croup is proven to be a sthenic, while diphtheria is undoubtedly an asthenic disease. It will be of interest to note some of the means by which the disease may be carried. It was stated at the recent International Medical Congress that seven epidemics of diphtheria were traced directly to infected milk. Five hundred cases were clearly shown to be due to drinking infected milk. If the disease is due to micrococci, then it is self evident that it can be communicated by any medium capable of carrying these micrococci, and we must say that the same channels of infection exist for diphtheria as for smallpox. But, in his recent work on this disease, Dr. JACOBI takes ground against the germ theory. So much for our minute researches into the realms of microscopy. One man or a set of men erect a structure of experiments upon the summit of which he places the resultant fact; when along comes some iconoclastic investigator, whose name and fame are great, who, with one blow, topples the structure to the ground (just when the rank and file were about to accept it), denies the truth of the theory, and either advances a new one, to make confusion worse confounded, or leaves us without any explanation, thereby increasing the doubt in our minds and causing us to wonder whom to believe. To sum up, then: We have no accurate knowledge concerning the nature of the causative agent of diphtheria, but the weight of evidence is in favor of the theory that the disease is caused by the entrance into and the development and multiplication of micrococci or parasitic vegetable bodies in the system. There is more unanimity in the fact that the disease or these spores can be communicated from one person to another or can be carried by any vehicle or through any channel, just as the poison of smallpox can be.

Pathology.—Very little additional information has of late years been contributed to the pathology of this disease, the greatest efforts having been directed towards elucidating its etiology. The disease is admitted to be a constitutional affection, with the seat of its most important symptoms in the throat. It has been demonstrated by the experiments of Professor WOOD and Dr. FORMAD (already referred to), that a severe inflammation of the trachea would produce a false membrane identical with that produced in diphtheria, with the only difference that micrococci were not so abundant in it. Therefore, they argued that there was nothing specific in the simple production of false membrane. From which we are led to conclude, that while this disease exhibits its recognizable and distinctive phenomena in the throat, yet the morbid changes which render it so dangerous an affection are produced in the blood, and are not yet clearly understood. In support of this view, we might quote the result of some experiments made by Dr. FORMAD, at Ludington, Michigan, during the prevalence of an epidemic of diphtheria there. Some animals were inoculated with the exudation from human beings. They sickened and died in a few days. The blood, examined during life and after death, contained micrococci, similar to those found in the blood of the diphtheritic children of Ludington. It was shown, in the course of these experiments, that the micrococci first attack the white blood corpuscles, which alter their appearance and lose their granulations. They finally become full of micrococci, and ultimately the corpuscle bursts, when its contents escape as an irregular, transparent mass, full of micrococci, to form the so-called zoöglea masses. The bone marrow was found full of leucocytes and cells containing micrococci. This same condition, as well as similar symptoms, were observed in the cases of diphtheria in children, which determined the identity of the natural and artificially produced diseased conditions. These results tend to prove the fact that diphtheria is a constitutional disease, and the profound demoralization of the blood which exists will readily explain the serious nature of the disease.

This altered and degenerated condition of the vital fluid will likewise make clear the cause of the serious after-effects so often found in this disease. To epitomize: while the ordinary diagnostic pathological phenomena of diphtheria are seated in the throat, the significant and dangerous morbid changes take place in the blood, and consist of degeneration of the white corpuscles (and most likely other and more important elements), induced by the presence of parasitic vegetable growths.

Diagnosis.—As may be anticipated from what has been said of the pathology of this disease, the most certain diagnostic points are to be found in an examination of the blood. Dr. FORMAD'S

experiments at Ludington resulted in the finding of micrococci in the blood of *every* case of diphtheria. In some they were free; in others they were found in the white blood corpuscles; while in a third class they were found in zoöglea masses; but, in some form or other, they were found in *every* case, and he must have examined a large number, since he tells us that "almost all the children had it," and Ludington has a population of over two thousand. Therefore, in the light of our present knowledge, it would seem safe to say that the crucial diagnostic point of diphtheria is to be found in the presence of micrococci in the blood. Taken in connection with the ordinary signs of the disease, the microscopic revelation of these parasites would render the diagnosis as certain as our present knowledge seems capable of making it. The ordinary symptoms of diphtheria, with which all are familiar, viz., sore throat, fever, and exudation, might occur from a simple, non-specific pharyngitis; but if, in connection with these familiar symptoms, we have great prostration, and a microscopic examination of the blood reveals the presence of micrococci, then can a positive diagnosis of diphtheria be made, with as much certainty as our existing medical knowledge warrants. This point is an additional argument of the necessity for every physician to possess a microscope and learn how to use it. This microscopic element of diagnosis is a very important one, and bears directly on the treatment. Because, if we possess a *certain* means of recognizing this disease in its *early stages*, we are much assisted in our treatment. Therefore, it behooves every physician who may be called to treat a case of suspected diphtheria, to at once make a microscopic examination of the blood and to record his experience, since by it we may be able to recognize and combat in its incipiency this fatal disease. The detection of the presence of micrococci in the blood is the only recent contribution to the diagnosis of diphtheria, and if found, by more extended experience, to be universal, it constitutes all that we require, since it will, if always present, furnish us undisputed and undoubted evidence of the nature of the disease.

Treatment.—This is, indeed, a wide, and almost an illimitable field; as in the case of every other disease about which our knowledge is uncertain, nearly every remedy in the Dispensatory has been at times vaunted as useful in diphtheria. The time, no doubt, will come when we will possess a specific antidote capable of destroying the vitality of this diphtheritic parasite, and in this direction there is ample room for research and fame. But with our present knowledge, the treatment of this disease must be mainly the treatment of symptoms. Since it is essentially an asthenic disease, since it proves dangerous mainly by exhausting the strength, we must early resort to supportive treatment. No recent developments *of any note* have been made as to the treatment of this disease. Among those that have appeared we may mention mercurial fumigations as recommended and practiced by Dr. J. Corbin (*see Half-yearly Compendium Med. Science, January*, 1882, *D. G. Brinton*, M.D.); pilocarpine muriate recommended by Dr. H. F. Williamson (*see the same*), and the use of electricity by Dr. G. K. Smith (*same*). While these various remedial agents may and probably do have *some influence* on this disease, yet our therapeutic beacon leads us to look for some agent possessing the power of destroying the vitality of the parasitic growth which causes the disease, and until such a discovery has been made, we can only *temporize* with the ravages of the poison, support the patient's strength and treat symptoms as we find them. The *Compendium* (already referred to) contains a quotation from the *Bull. de Therapeutique* on the *local* use of *papaine*, the extract of the *carica papaya*, in diphtheria. It is deserving of notice and commands further investigation. In relation to it, Dr. Bouchut stated to the French Academy of Medicine "that a piece of diphtheritic membrane, thick, elastic and resistant, if placed in a 33 per cent. solution of papaine, will be dissolved in a few hours in the cold; heat effects solution in a few minutes. If a piece of moist fibrin be touched for an instant with the solution, it retains the power of dissolving and forming peptone, even though afterwards washed in a stream of water for several hours. These experiments suggested the topical use of papaine in diphtheria. It was found, however, that solution takes place much more slowly when the membranes are still attached to the living tissues, than when in a test tube; nevertheless, the treatment has been tolerably successful and is worthy of a further trial. Dr. Bouchut applied it in thirty-two cases, in children and adults, with four deaths" (a very gratifying result). "The fluid must be applied every two hours." When successful "it gradually softens and disintegrates the exudation and causes it to disappear in from three to five days." This experience of *papaine*, with the proportion of cases apparently in its favor, from a reliable authority, would entitle it to consideration, and further research into its curative or diphtheritic preventive power should be encouraged. *To*

summarize: We possess no specific for diphtheria. Our treatment must be that of symptoms as they arise, combined with a general tonic plan. We can only hope to successfully combat this fatal disease when we have discovered a remedy capable of neutralizing or destroying the vitality and activity of the poison producing it.

Abortive Treatment.—In conclusion, an interesting point has been raised by an English physician, as to whether a threatened attack of diphtheria can be aborted. He had experience with two cases who, after exposure to diphtheritic contagion by nursing fatal cases of the disease, were taken sick, with symptoms resembling those of diphtheria. The patients were seen very early in the attack and were put to bed, under an anti-febrile course of treatment, with tonics and local applications, or astringent gargles to the throat. No *special* line of treatment was observed, quinine, iron, chlorate of potash, and alcohol, being the chief means employed, and in each case what threatened to be an attack of diphtheria resulted in complete recovery in a few days. Of course, these two cases are insignificant in establishing a law that this disease can be aborted, but straws tell which way the wind blows, and if further observation proves that we can, by appropriate measures, prevent an attack of diphtheria, this observation of our British brother will assume due significance. He is careful to note the fact that if this disease can be aborted, it can only be accomplished by seeing the patient very early in the disease, before it has become developed to any extent.

In continuation of this report on Infectious Diseases, we will next week discuss the most recent developments concerning *Scarlet Fever*.

(To be Continued.)

Correspondence.

Reducing Fractures without Pain and without Anæsthetics.

Ed. Med. and Surg. Reporter:—

Many years ago, R. W., a boy of fourteen years of age, fell and experienced a fractured arm. It proved a Colles fracture. Splints were applied and held in place by ties of strong tape. In four weeks, to all appearance, the limb was restored to symmetry and health. The dressings were removed and the arm and hand were slowly brought into every day use.

A week later my attention was called to it. To my mortification, there stared at me all the original deformity seen at the moment of the accident. What had happened? Nothing! The lad used it as he found occasion, and with no particular occupation. Gradually, the bony displacement had returned, in mockery of chirurgical therapeutics. The injury was now five weeks old. What was to be done?

We have all heard of broken limbs in malposition being purposely broken over again. Such a course seemed irrational, indefensible, and therefore, unsurgical.

The splints were re-applied. This time, to the outside board from a cigar box was nailed an infra piece at right angles with the side piece; this basic splint was as wide as the thickness of the arm, to sustain the weight of the forearm and hand, and afford barely sufficient border to support the lower edge of the inside splint. The whole was tied firmly with two tapes, and supported in a sling. It was dressed and tightened up every one or two days.

The weight of the hand and the gradual painless pressure of the splints slowly corrected the ugly abnormal features, and in two weeks it was a satisfaction to witness all deformity had gone, and the member restored to natural shape. The mistake was in removing the splints prematurely.

Aside from recovering lost ground without harm, this case furnished important instruction, and outlined a new and better rule of practice. It taught how to dress fractures without inflicting pain, and without the use of anæsthetics. It taught how to dispense with what the writer now regards as the absurd proceeding of *pulling the injured part, to "set the bones."* That old first step is agonizing and needless. If splint pressure and position of limb will painlessly reduce fracture and deformity after five weeks' existence, why not employ them for that object in the outset, and avoid the flourish of setting garnished with screams? The simplest and easiest is the best. Therefore, for more than a decade, every case of fractured arm in my hands has been dressed in the manner above described, without pulling, without pain, without chloroform or ether, and without resulting deformity. With daily dressing, in a few days or a week apposition of the fragments is gradually and insensibly effected. As the swelling subsides the natural contour of the member is brought about, all in ample time. As a general rule, bandages to fractured limbs should be condemned and avoided. But the subject of absurd bandaging is sufficient for another article.

Stockton, Cal. A. S. Hudson, M.D.

Malformation of the Urethra.

Ed. Med. and Surg. Reporter:—

Authors on surgery state that malformations of the urethra in male children are exceedingly rare. I, therefore, take the present opportunity of reporting a case in which there was occlusion of the external meatus urinarius, absence of the frænum, and paraphimosis, in a male child, when it was born.

Mrs. Edward O., aged thirty eight, gave birth to her eighth child, a male, in which the above named malformation existed, at eight o'clock, A.M., of January 16th, 1882. Dr. J. P. Treacy, was her accoucheur. I saw the child, with Dr.

Treacy on January 17th. The child had not passed any urine since its birth, about thirty hours intervening. The child was fat, healthy, and otherwise well developed. All of Mrs. O's, other children are healthy and well developed. In order to remedy the occlusion of the meatus, I made a vertical incision with a bistoury, about one-eighth of an inch deep, and along the depression which was present over the meatus, and directed the nurse to use a small napkin separately over the penis, so as to be certain the child urinated *per via naturalis*. The next day, when I saw the child, with Dr. Treacy, we found it had urinated twice *per via naturalis*. The child has had no further difficulty in urinating. The swelling of the prepuce, which was present at birth, has now subsided, but paraphimosis still exists, and I think will continue to exist, as the prepuce is very short and covers the upper two-thirds of the base of the glans penis, like a hood. To-day, in my presence, while the napkin was off, urinated naturally.

JOHN M. BATTEN, M.D.
73 *Sixth Avenue, Pittsburgh, Pa.*

A Case of Congenital Gastro-Diaphragmatic Hernia.

ED. MED. AND SURG. REPORTER:—

This somewhat remarkable case occurred twenty-two years ago. It has been withheld, on account of the very imperfect observations which I was enabled to obtain.

I was called at 4 o'clock in the afternoon of the 15th of the third month, 1860, to see Elizabeth, a four year old daughter of Andrew Graham, living at New Garden. She had been, up to this date, a sprightly and healthy child; never having been seriously sick, or suspected of anything wrong in her organism.

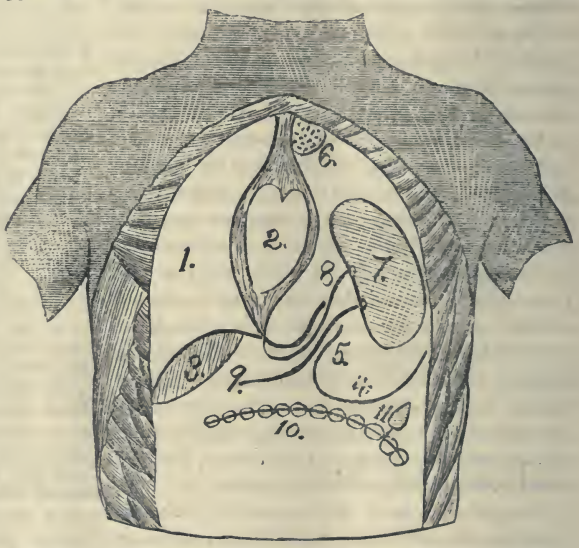
She ate her dinner as usual, but soon began to complain of pain in the stomach, and retching to vomit. I found her suffering severely from the pain, which she referred to the epigastrium, and the retchings were incessant. There was nothing raised from the stomach, and whatever she made an attempt to swallow was instantly rejected; and this continued to be the case until her death. She inclined to the position on her knees and elbows. Owing to a timid and fretful disposition, increased by an aged and indulgent grandmother, she would not allow me to approach her.

My early diagnosis was, stray worms in the stomach, which the result will probably justify. A few hasty and imperfect observations only could be made during life. Pulse very frequent and feeble; respiration hurried and laborious, with a marked elevation of the right shoulder; thorax was resonant on both sides; no tendency to cough.

As it was found impossible to give medicine by the mouth, recourse was had to enemata and external appliances for relief. The pain was, in a measure, amenable to the use of anodynes, but the retching never, till death relieved her, on the third day.

An imperfect and hurried post-mortem was obtained, under strict surveillance, just before burial. My notes are, consequently, as imperfect as my observations during life.

Nothing remarkable was observed in the cadaver, except a fullness in the left pleural and hypochondriac regions. When the abdominal viscera were brought into view it was apparent that there was a displacement or a negation of some of the organs. The liver was in situ; the stomach was nowhere to be seen; the left diaphragm was pressed down, presenting a strong convexity below, and depressing the transverse colon, to which the spleen was attached by loose tissue. On a



1. Right lung. 2. Heart, pushed to the right. 3. Liver. 4. Left diaphragm distended. 5. Inflected tube, laid open. 6. Root of left lung. 7. Stomach (reduced to show the tube of the diaphragm). 8. Œsophagus. 9. Duodenum. 10. Transverse colon. 11. Spleen.

closer inspection, there was found a circular perforation of the distended diaphragm, of an inch and a half diameter, with its edge rolled up into the thorax. Both the œsophagus and the duodenum were traced into or through this aperture into the pleural cavity.

The thorax was then opened, when the character of the case became more apparent. The left lung was entirely wanting or only represented by a dark-colored button the size of half a walnut, at its root, in the apex of the cavity. The pleural cavity was wholly occupied by the distended stomach, with its cardiac extremity upward, and the large curvature resting against the costal pleura. It was now seen that the involuted margin of the aperture in the diaphragm was carried up in the form of a delicate tube, inclosing the œsophagus and duodenum, for more than two inches. The stomach was greatly distended with gas, pressing the diaphragm downward, and pushing the heart over toward the

right side. In addition to the gas, the stomach contained a few ounces of mucus, and broken down food, and eight large, living, lumbricoid worms, thus verifying the diagnosis. There was no effusion of serum, or of coagulable lymph, or morbid adhesions to be found in any part of the body, to indicate inflammation, either past or present.

It is difficult to draw satisfactory conclusions from this very imperfect, though faithful narrative. Certainly nothing in the previous history of the child, or in the pathological phenomena observed during her illness, would have led any one to anticipate the existing state of things, as revealed by the autopsy, nor would it have availed anything to have known it. It must, I think, be obvious that this displacement was congenital The abnormal condition could not, by any possibility, have occurred within the last three days; and there was no post-natal record to which it could be referred. Whether should we refer it to an original defect in the primordial germ? or may it have been caused by some severe prenatal concussion, or compression, of the early and nascent embryo?

Every physician is aware of the extreme irritation which is produced in the stomach by the sudden irruption of a few worms into it. It is not so easy to comprehend how so many large worms should have thus suddenly found a passage through the deflected duodenum. Yet, while in health, the passage must have been quite pervious. They may have become entangled in a ball, or knot, as they sometimes do, and in that condition entered the stomach. We only have the fact of their presence. The gas in the stomach may have originated, more or less, from post-mortem changes. E. MICHENER, M.D.

Sylvania, Chester Co., Pa.

News and Miscellany.

The Horrors of Smallpox.

A secular paper gives a graphic description of the horrors of this terrible disease. Recently, in Jersey city, a shoemaker died of the disease, and when the health inspector visited the house, he found the following horrible sight. The wife was lying on the floor on a bundle of rags, suffering with the disease, while on either side of her lay a child, dead from smallpox. In the corner of the room a third child was ill with it, while the remaining two were cuddled up to a small stove, but had not yet been attacked.

Medical Ethics in France.

The Société Médicale de Nievre have recently drawn up a little code, which our American brethren would do well to imitate. It runs as follows: 1st. Medical men honor their profession by honoring themselves in their confraternal relations, and, consequently, by observing, in their mutual intercourse, the greatest courtesy in actions and in words. 2d. Every medical man called in accidentally to a patient who is under treatment, in the absence of the usual medical man, should restrict himself to prescribing the medicines necessary for the moment, and not make any remarks upon the treatment which has been followed. 3d. He should not call again upon the patient, unless he be called in consultation by the medical man in attendance. 4th. Medical men called in consultation should abstain, while in the presence of the patient and of his friends, from any expressions that may prejudice the usual medical attendant. In private consultations, that is to say, between the medical men only, any expressions which may throw discredit on either of the consultants is reprehensible. The treatment agreed upon by the consultants should be carried out by the usual medical man. 5th. The consulting medical man should not go to see the patient, unless he be again called in, or authorized to do so by the medical man in charge.

Smallpox in Philadelphia.

According to the Health officer's statement, smallpox is rapidly getting under control in this city. Strange to say, and contrary to precedent, the disease has diminished since the advent of the cold spell. As high as twenty new cases have been reported in one day, and from seventeen to nineteen have been the rule for some time past. But on the twenty-third instant, only thirteen were reported, and there has been a rapid decline, so marked that on the twenty-fifth not a single new case was reported.

A Good Way to Increase Smallpox.

One day, recently, seven tramps, broken out and covered with smallpox, who had come from other cities, boldly walked into the Health Office in Chicago. On the same day, a man who had just arrived from New York, whither he had come from Germany, walked into the same office, with a very bad attack of the disease. Such carelessness seems like tempting nature, and must ever be rewarded by a plentiful crop of disease. There is only one way of preventing such criminal negligence, namely, by strict legislation, rigidly enforced.

Insanity a Cause for Divorce.

A recent decision in an English divorce court is of interest in this connection. The first cause for the husband to suspect his wife's sanity occurred on the nuptial night, when she refused to allow the marriage to be consummated. He sent her home. Subsequently she was examined by several physicians, who agreed that she was afflicted with melancholia, and was not in fit condition, mentally, to enter into a marriage contract. The court held the same view, and declared the marriage null.

Anti-Vaccinationists.

The London *Lancet* says, "The Anti-Vaccinationists at Dewsbury, recently organized a demonstration against the vaccination officer. Two brass bands, torch bearers, sensational pictures, and an effigy of the obnoxious official, had part in the demonstration. He was one of the most amused of the spectators."

Personal.

—M. Charles Richet has lately made a communication to the Paris Société de Biologie, in which he seeks to show that after the death of an animal the nerves of sensation retain their functions longer than the nerves of motion.

—The Wyatt-Edgell prize, offered in England, of £200, for the best essay on the "Range of Heredity in Health and Disease," has been awarded to Mr. George Gaskoin.

—Dr. John H. Ross, a leading physician of Kokomo, Ind., recently caned the editor of a secular paper, on account of an article published by him.

—Dr. J. S. Billings and Dr. H. J. Bigelow have been elected honorary members of the London Clinical Society.

Items.

—Messrs. Dickinson, of Broad street, London, are painting a large group picture of the garden party given by Baroness Burdett Coutts to the International Medical Congress, in August last. The picture will contain about one hundred of the leading visitors and presidents of sections. When completed, no doubt it will be engraved. Such an engraving would make a handsome ornament for the wall of a doctor's office.

—A young woman, who had a peculiar affection of the face, for which she persistenly refused to allow surgical interference, died recently, in Virginia. Her grave was robbed, but for what purpose is not stated, although the circumstances of the case would seem to implicate the physicians of the neighborhood.

—A midwife in England was committed recently for trial for manslaughter. She had, it was alleged, conveyed puerperal fever from one patient to another, and death resulted in the second case.

—The Rochester *Express* tells about a very deaf man, who, being admonished on a very cold day, that if he did not protect his ears they would freeze, replied, "Suppose they do, they're no good."

OBITUARY NOTICES.

DR. BRIERRE DE BOISMONT.

We have just heard of the death of this eminent alienist, in his eighty-fifth year, at St. Mandé, where he had for some years lived in retirement. He was one of the founders of the Medico-Psychological Society of Paris, of which he was also one of the most zealous and eminent members. His contributions to the literature of insanity were very numerous and authoritative.

DR. F. MEYER.

Dr. F. Meyer, a leading physician of Bucyrus, Ohio, died recently, having suffered from nervous disorders for six years. He was a native of Germany, occupying the rank of a Count during the revolution of 1849. He espoused the Liberal cause, and with many others was forced to leave the country. He came to America and settled in Bucyrus, and for many years had an extensive practice as a physician.

DR. MAURICE BEESLEY.

Dr. Maurice Beesley died at his residence in Dennisville, N. J., recently, in the seventy-seventh year of his age. His death was caused by general debility. He was born at Beesley's Point. He was the representative of Cape May County in the New Jersey Legislature for four years, and was, until last summer, when he resigned on account of failing health, Superintendent of Schools for Cape May County, which office he held from its creation. He was one of the oldest graduates of the University of Pennsylvania, and has been practicing medicine in Cape May county for the past fifty-five years. He was the author of several works on geological surveys, and was considered an authority on the boundary lines of the sunken forests and cedar swamps in that county.

QUERIES AND REPLIES.

Dr. M. H. S., of Pa., asks us whether the Philadelphia County Medical Society will admit female physicians. Also, whether they have removed the restriction from allowing their members to consult with professors in the Woman's Medical College.

Answer.—1st. The Society have decided to admit to membership all qualified female practitioners that may apply. 2d. Such a restriction never existed. The President of the Society is a Professor in the Woman's College.

A subscriber asks for a working formula for using gelatine as a suppository.

Answer.— ℞. Gelatin, 1 part
Glycerine,
Water, āā 2 parts. M.

MARRIAGES.

CURRIER—CONVERSE.—In Newport, Vt., Dec. 29th, by Rev. J. W. Adams, D. M. Currier, M.D., and Annie M. Converse, both of Newport.

PIERCE—HEATH.—By Rev. Joseph E. Andrews, assisted by Rev. J. C. Hunter, at the residence of the bride's aunt, Miss M. J. Parkinson, West Elizabeth, Pa., Tuesday evening, January 3d, 1882, A. M. Pierce, M.D., of Gill Hall, Allegheny Co., Pa., and Miss Mary E. Heath, of West Elizabeth, Allegheny Co., Pa.

PYKE—LEAMING.—In Romney, Ind., December 29th, 1881, by Rev. John A. Campbell, Albert D. Pyke, M.D., and Elizabeth M., daughter of Dr. Furman Leaming.

STARKEY—PITCAIRN—At Shadyside, Pittsburg, Pa., on December 22d, 1881, G. R Starkey, M.D., of Philadelphia, and Miss Margaret Pitcairn, of Pittsburg, by Rev. W. H. Benade.

WETHERILL—STRECKER.—On January 5th, by Rev. D. L. Patterson, at his residence, Henry M. Wetherill, Jr., M.D., and Florence Strecker, both of Philadelphia.

DEATHS.

BEESLEY.—On the 13th inst., Dr. Maurice Beesley, at Dennisville, N. J., aged 77 years.

GEORGE.—January 1st, 1882, Harry Leslie, son of Dr. M. R. and Jennie H. George, of South Bend, Armstrong county, Pa., aged 6 months and 13 days.

PARMLY.—In New York, on Sunday, January 15th, Dr. Jahial Parmly, aged 74 years.

WILSON.—At Jacksonville, Florida, on the 15th inst., J. Theodore Wilson, M.D., aged 27 years.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1302.] PHILADELPHIA, FEBRUARY 11, 1882. [Vol. XLVI.—No. 6.

Original Department.

Lecture.

EXTRAVASATION OF URINE.

BY FESSENDEN NOTT OTIS, M.D.,

Clinical Professor of Diseases of the Genito-urinary System, in the College of Physicians and Surgeons, New York.

(*Concluded from page* 114.)

Gentlemen:—It has now been five weeks since we operated upon a case, on Blackwell's Island, for extravasation and infiltration of urine. Some new features of interest have developed since I last spoke to you about the case, and I will again call your attention to it to-day. The patient was doing very well for a while after the operation, when, on the eighth day, a profuse hemorrhage occurred, and by the time I reached the patient he was pale, the pulse was rapid, and his condition was such as to require free stimulation. Blood was still flowing from the bladder and penis, although a superficial plug had been introduced and ice applied. The patient was straining to evacuate the bladder, which was filled with blood clots. I passed a large-sized catheter into the bladder, attached to it a syringe, washed out the bladder, then introduced a canula-chemise through the wound into the viscus, to stop hemorrhage. The canula-chemise was made by passing a catheter through a snugly-fitting hole in a piece of linen about ten inches square, then tying the cloth about one inch from the eye of the catheter and turning it forward, making a sort of umbrella. This is rough and lies in folds, so that it causes the patient a good deal of pain in introducing it through the sensitive wound; and on this occasion it occurred to me to smear the cloth well with hard soap, and with soap also to fill up the shoulder at the junction of the cloth with the catheter, after which it slipped into the bladder readily. If this does not check hemorrhage, the folds of the umbrella may be opened and lint or cotton packed around the catheter, and a sufficient amount of pressure be thus exerted to accomplish the object desired. Then fever set in, which was accompanied by profuse sweating. It was then found that a pus cavity had formed in the tissues of the abdomen, and some infiltration of urine could be recognized by the crepitus resulting from its decomposition. The manner in which infiltration of urine may take place in one part and not involve another is illustrated in this simple but ingenious manikin, which shows the division between the superior and inferior, the anterior and posterior penile portions, the relations of the deep and superficial perineal fascia, the triangular ligament, the scrotum, vas deferens, etc. An incision was made, about two inches in length, in the line of the groin, laying open a cavity filled with very fetid pus. A drainage tube was then introduced and the pus cavity washed out with a solution of carbolic acid, about 1 to 100. The patient did very well for some days, but fever again was set up, there was more or less profuse diaphoresis, and on examination another pus cavity was found in the tissues of the scrotum. An incision was made into this, after which the case went rapidly on toward recovery. When I saw the patient a week ago he was passing most of his urine through the natural channel, only a little dribbling through the opening in the perineum. This was very satisfactory, but a few days later the urine came less from the

urethra and more through the perineal opening, the cause of which was found to exist in an obstruction to the flow of urine through the natural channel. Now, this is an accident which often occurs when an opening is made through the perineum into the bladder for any cause, as, for instance, for the removal of stone, and the perineal opening is then slow in healing, sometimes constituting a permanent fistula. When this occurs, I think it will be found that, in ninety-nine cases out of a hundred an obstruction to the flow of the urine exists in the anterior portion of the urethra. This is true, too, in cases in which there has been no antecedent disease. In cases where there has been perineal section for stone, for instance, and in which there has been no antecedent gonorrhœal disease, we may yet have obstructions, strictures, resulting from the same causes which have produced the stone, namely, lithiasis. The presence of calculous material passing through the urethra irritates it at certain points, which, when continued, produces such an inflammatory condition as results in the accretion of plastic material at this point, constituting stricture. Whatever different theories may be entertained with regard to the cause of stricture, I think we must necessarily, in taking a common sense view of it, come to accept the simple explanation of plastic material being drawn to the point at which irritation exists, from whatever cause; not necessarily irritation the result of specific disease, but irritation from any cause whatever, will produce stricture, provided it exist in sufficient intensity and long enough to cause the deposit of plastic material at this point.

You will remember that I attributed the cause of this patient's difficulty to a folliculitis supposed to exist behind a stricture, for there was no other way to account for it. The patient, however, had had for a number of years a certain amount of urethral discharge, but to which he paid no attention. He had no difficulty in passing his urine until this swelling occurred in the perineum, therefore we could only attribute his difficulty to the cause which I have already named, that is, follicular perforation of the urethra, the result of a folliculitis existing behind a stricture. You will bear in mind the fact that a stricture even of large calibre is capable of holding behind it the solid material of the urine, which may give rise to irritation, and this again to inflammation in a follicle in which suppuration takes place and penetrates the urethral wall, and allows, in many instances, urine to pass through into the tissues. Now as soon as this takes place, of course, inflammation is set up by the presence of urine, and an abscess of greater or less size is formed. The follicular penetration may be so small that the urine can extravasate only in very small quantity, in which case only a very slight and localized inflammation will result, and about this a sufficient amount of plastic material may be thrown out to consolidate the parts and leave a little, hard bunch. But where the opening is larger, urinary infiltration of the tissues takes place more abundantly in proportion to the size of the opening, and then the progress toward extensive destruction of tissue goes on rapidly.

The examination of the patient in the present case sustained the above views. In the first place, the urethral orifice was of small size, and we consider this contraction of the orifice a stricture. Anything which contracts the normal calibre of the canal permanently may be considered a stricture, as far as its effect upon the passage of the urine is concerned. Then, behind the contracted orifice this patient had three points of stricture within a distance of two and a half and three and a half inches, which, being measured, were found equal to ten millimeters. This degree of contraction was determined by the proportionate measurement, which always holds true, between the circumference of the penis and the size of the urethral canal. In this case the circumference of the penis was three and a half inches, which called for a urethra which would admit an instrument No. 35 French.

The measurement of the canal was made with the urethrometer, an instrument which I will briefly describe for the benefit of those students who may not be familiar with its working. The urethrometer has at one end a bulb, which expands or contracts synchronously with the movement of a screw at the other end. When closed it usually represents 15 French, and when the bulb is completely expanded by turning the screw at the other extremity it represents 45 French, or by turning the screw less, it may be made to represent any number between these two extremes. The end of the instrument is covered by a small rubber stall, which protects it and prevents folds of mucous membrane getting between the arms of the instrument and becoming pinched. The instrument is usually composed of springs, but the one which I show, being of older date, is composed of hinged arms; but the two kinds work on the same general principle. The degree of expansion or contraction of the bulb is indicated by a dial at the screw extremity.

This instrument was passed down to the bulbo-

membranous portion of the urethra and turned up to 34 French, which was about the proportionate relation between the size of the penis and of the urethra in this case. The bulb was then gently drawn forward until arrested, when it was lessened by turning the screw until it passed through the contraction or stricture, then again turned up to the normal size, but again twice turned down to pass through two more strictures which existed within an inch and a half or two inches and a half of the former one. Let me remark here, that there exists a normal difference of two millimeters between the size of the bulbo-membranous and the middle portions of the urethra.

The first stricture in this case was found just over the scrotum, which fact would suggest that perforation had taken place here, and would account for infiltration first occurring in the scrotum. If you will recall the arrangement of the fascia, as illustrated in a manikin shown at a former clinic, which made a division into anterior and posterior penile chambers, you will understand how infiltration of urine in the posterior part may be entirely separate from infiltration into the anterior part, and hence, involvement of the scrotum, without that of the body of the penis, as occurred in this case. From the scrotum the urine found its way through the cribriform fascia up into the groin and integument of the abdomen.

While, therefore, we cannot ascertain positively that there was a follicular opening which led to the trouble in this case, I think we may, by exclusion, conclude with reasonable certainty that such was the case, and while before extensive infiltration of the tissues occurred through this abnormal departure in the urethra, which was relieved by operation, the same pathological state now prevents closure of the perineal opening.

Yesterday I passed a dilating urethrometer down the urethra and divided these strictures. This instrument consists of a pair of very small bars, connected by short arms, very much after the plan of a parallel ruler. In the principal bar a knife is made to run in a groove, which extends from one end to the other, and at the extremity is a slot, which conceals the knife when the blade is passed into the end of the instrument. These bars are capable of being separated to a point representing forty-five millimeters French, corresponding to the scale of the urethrometer.

Now, when you come to understand the nature of every stricture, as I have previously described it to you, that is, that it is made up of plastic material which goes on to be fibrous, possessing all the qualities which we recognize in cicatricial tissue, that is to say, density, firmness, and a certain amount of resiliency, you can then understand that unless this is fixed in some way, the knife, in passing across the stricture, will not be likely to sever it, any more than if it were drawn across a loose rubber band. Consequently, in order to divide a stricture, we must fix it, make it tense, and as thin as possible, so that it can be divided with a narrow blade. This principle may be illustrated by putting a rubber band rather loosely on the dividing instrument. When we find that, instead of being divided, the band stretches and allows the blade to pass through without severing it. If, in drawing the blade through a stricture, you meet with considerable resistance, remember that this instrument is not a divulsor; you should not use too great force, lest the instrument break, but push it back and release it, and try again, and if necessary draw the blade through two or more times, only at the last time turning the dial up to the full size of the urethra. When the stricture is completely divided, as is illustrated by the division of this rubber band; there remains no obstruction at that part of the canal whatever, and a sound, either bulbous or other kind, can then be passed down without the least difficulty. Then, if the stricture has been completely divided and the lips of the wound are kept entirely separate until healing has taken place, we find no tendency at all to a recurrence of the stricture. Therefore, as a rule, to which there are not many exceptions, this operation has the advantage of resulting in a complete and thorough cure of the stricture.

This plan of treatment of such perineal openings as do not readily heal is not novel. I have many times had occasion to demonstrate the fact that perineal openings, however made, are, in cases in which they do not readily heal, kept open by an obstruction in the urethra, anterior to the perineal wound. While passing through the Lock Hospital, in London, several years ago, in company with Mr. Coulson and Mr. Teevan, two of the surgeons of the hospital, we were discussing the subject of stricture, particularly with reference to strictures of large calibre, and Mr. Coulson called my attention to a certain patient, saying that he had been in the hospital for a long time; he was suffering from a perineal fistula, which they were unable to heal. Previous to his entrance into the Lock Hospital he had been at Guy's, St. Thomas', and other hospitals in London, where he had undergone almost all the known procedures for the closure of his peri-

neal fistula, but without success. Three months later an account of this case was published in the London *Lancet*, August 20th, 1875, under the title of "Perineal Section, followed by the operation of Dr. Otis, for the Cure of Fistula in the Perineum," by Walter Coulson, F.R.C.S., surgeon to the Lock and St. Peter's Hospitals.

After giving the previous history of the case, he says: "The perineal wound became merely a fissured opening, but still it would not quite heal, and on every occasion that the patient passed water some portion of the urine escaped through the fistula. *The question then presented itself, whether the fistula might not possibly be kept patent by some constriction in the penile portion of the urethra?* With the assistance of Dr. Otis, an examination was made with the urethrometer, *and the existence of three distinct points of stricture was demonstrated.* It was, therefore, resolved that resort should be had to his operation. The patient was placed under the influence of ether, administered by Dr. Knott, and the urethrotome of Dr. Otis was passed down as far as the fistula. The instrument was then made to indicate a dilatation corresponding to 32 of the French scale, and the three points of contraction were freely divided. The last mentioned result was verified by the introduction of the bulbous sound (32), which was passed down as far as the fistulous opening, and withdrawn without a catch. A tube, open at both ends and about five inches long, was tied into the urethra after the operation, and was allowed to remain for six hours. This was at the suggestion of Dr. Otis; but the tube was removed at the patient's request, as there was no sign of bleeding: the loss of blood after the operation was also slight. From the date of the operation, July 19th, to the 24th, no unfavorable symptom manifested itself. A 32 bougie was daily passed along the urethra, to prevent adhesion of the cut surfaces, *and the patient left the hospital cured.* When he reported himself to me, August 16th, *the fistula was completely healed.* Among the complications arising from stricture, extravasation of urine, and injury to the urethra, there are few which occasion more inconvenience to the patient, and trouble to the surgeon, than perineal fistula. In D.'s case the complication resulted from an operation performed for the relief of extravasation, and dilatation having been tried and failing to close the fistula, perineal section was, for a second time, resorted to; but in spite of this operation, and subsequent dilatation, the fistula remained open."

"The result of Dr. Otis' operation certainly proved that slight contractions, which are not usually recognized as strictures, may offer obstruction to the passage of the urine sufficient to prevent a urinary fistula from healing. The result of the internal division of the strictures and the daily introduction of full-sized instruments left the mucous wall of the canal, after complete cicatrization had taken place, as supple and non-resisting to the passage of the full-sized sound as a perfectly healthy urethra."

Such is the testimony of so eminent an authority as Mr. Coulson, with regard to the complete absorption of stricture material after division by this method.

The subject is one of such great importance that I deem it proper to quote another case which was reported by Mr. Teevan, Surgeon to the Lock and St. Peter's Hospitals, and published in the *British Medical Journal* of October 21st, 1876: "*Traumatic Stricture and numerous Penile Fistulæ Cured by Internal Urethrotomy.*" Mr. Teevan related particulars of the case. The patient was a sailor, who had injured his scrotum and penis by a fall twenty one years previously. Numerous abscesses formed and sixteen fistulæ resulted, through which all the urine was passed. In the course of a few years the fistulæ in the scrotum (eleven in number) closed, but those in the penile urethra remained open. For a period of more than three months Mr. Teevan tried three separate plans of treatment, with but partial success. First, retaining a catheter in the bladder. Second, the patient drawing off all his own urine with a catheter for two months. Third, the application of heated wires and probes tipped with nitrate of silver. On January 6th Mr. Teevan performed Dr. Otis' operation, and *nine days afterward all the fistulæ were closed*, and remained so permanently. The points of interest in the case were:—

1st. The stricture being a traumatic one of the worst description.

2d. The fistulæ being in the penile urethra, always most difficult to cure.

3d. The fistulæ having been open for the long period of twenty-one years.

4th. The failure of three different methods of treatment.

5th. The permanent closure of the fistulæ after the strictured portion of the canal had been enlarged by Dr. Otis' urethrotome *to its natural calibre*, which was 31 millimeters in circumference.

6th. Subsequent to the operation no catheter was left in the bladder, nor was the urine drawn off.

[At a subsequent clinic, Professor Otis stated that the patient had entirely recovered, and although he had not yet left the hospital, he was walking about the wards.]

COMMUNICATIONS.

THE THERMOMETER AND ITS USE IN MEDICINE.

BY HUGO ENGEL, A.M., M.D.,

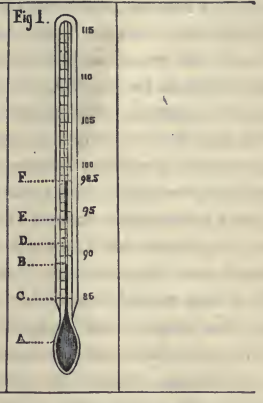
Professor of the Principles and Practice of Medicine and of Clinical Medicine, at the Medico-Chirurgical College, etc., etc.

It must be admitted that there are still many, and especially older physicians, who in their daily routine practice do not make use of the clinical thermometer. Though often, perhaps, excusable, they are wrong in not doing so, and without knowing it, they harm their reputation by such neglect. First, the physician who employs all modern modes of investigation in the examination and treatment of his cases, will always make a better impression upon the public than the one who, with an earnest face, simply looks at the patient and the tongue, feels the pulse, and asks a few questions. But there is another point which should induce every practitioner to use all modern appliances in the performance of his professional duties, and especially the thermometer, and that is the rapidity and certainty with which the latter frequently enables the physician to recognize a disease, or to give a sure prognosis, while without the use of this instrument he may have to wait days for the development of other symptoms, ere he can arrive at a definite conclusion. I said above, that many physicians are excusable if they do not use the thermometer, and so they are. When they studied medicine, the application of this instrument in disease was not known as yet, and therefore, not taught. Later, especially if practicing in the country, they had no opportunity of becoming acquainted with its use. To remedy this, I shall endeavor in the following to describe the best clinical thermometer, which every physician should possess, then show how it is best employed, and lastly, try to prove its great value in the diagnosis and prognosis of certain diseases which may any day come under the care of the practicing physician.

The physician should buy only a *self registering* thermometer. The following cut (Fig. 1) gives a good illustration of it.

A is the bulb of mercury, which ascends here as a fine column, C, up to B. From B to E is a hollow space D, filled with air, and this column of air, D, divides the upper column of mercury E.....F from the lower one, ending at B. The physician has only to do with this upper column of mercury E.....F. A scale is cut into the glass and the thermometer should indicate at least the degrees of temperature from 85° to 115° Fahr. Each degree is generally subdivided into four or five parts. The way the instrument works,

Fig 1.



is the following: A self-registering thermometer is made by using an ordinary thermometer tube, with a very fine bore, and then breaking the mercurial column at one point by the insertion of a small portion of air. When the temperature causes the mercury to expand, the air is carried forward, and, of course, pushes the mercury above it forward also. When, however, the temperature falls, the lower column of mercury contracts, the air between the two parts expands, being relieved from pressure, and thus keeps the index (the upper mercurial column) in its original position, being also assisted by the capillary attraction of the small tube on the index column. The lower column can ascend to the same point as the upper did, provided the temperature is proportionately increased, but the register being arranged for the length of the entire column, any shortening of it by the separation of a portion for the index will necessarily require a much greater expansion of the remaining portion in order to occupy the same space.

The reader will easily see, therefore, the reason why the upper or index column of mercury indicates the degree of temperature to which the instrument has been exposed, and why it will continue to register the height once reached, unless it is brought in contact with a still higher temperature than the one it records, or is forced down by the physician, as will soon be mentioned.

A physician should buy a clinical thermo-

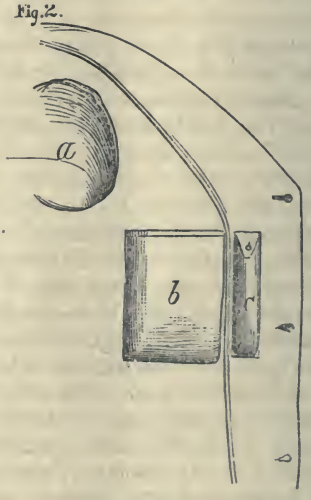
meter—as the one just described—from a first-class firm only, and secure an English imported one, which is accompanied by a statement of the Observatory at Greenwich, certifying, usually, that the instrument varies only $\frac{1}{100}°$ or so, therefore, so little, that its reliability for medical purposes is not influenced thereby. The price for such instruments varies from $4.50 to $5.50; if higher, the case is of silver, or otherwise specially valuable. But there are very good thermometers made in our country also, and they can be had for from $1.75 to $3.50. If the physician, however, buys an American thermometer, he should send the same, by mail, to the Observatory of Harvard University, to have it tested. They charge only twenty-five cents for the testing, and the great necessity of having this done is proven by the fact that the Harvard Observatory has tested already hundreds of American thermometers, which varied from ½° to over 2°, and the authorities there have publicly stated that the majority of American thermometers vary over 1½°. Such an instrument most certainly is useless, nay, even dangerous. The fact of so many being incorrect proves the necessity of having every clinical thermometer tested by the Harvard Observatory, if it is not already accompanied by a certificate from a similar institution of equal reputation. If found to vary more than a small part of a degree, the instrument should be returned to the firm it was bought from, and an exchange, or return of the money insisted upon.

After the physician is in possession of a reliable, self-registering thermometer, which should be well protected by a metal or wooden case, lined with velvet, he must make arrangements for carrying it always safely with him. For this purpose I recommend, as the most useful, the following: The physician instructs his tailor to make him a small pocket, just large enough to hold the thermometer case, adjoining his inner coat pocket, and a lap with a button hole over the pocket, and sew on the latter a button, so that the pocket can be securely closed. The following cut (Fig. 2) will convey a better idea than any description can give.

Whoever does consider such an arrangement superfluous, has not been in the habit, as yet, of daily carrying with him a thermometer, because every one who has will have paid for at least half a dozen he broke, in a year. These thermometers seem to be endowed with a special tendency to fall out of any other pocket they are carried in, no matter how securely packed away, and I never have known any such thermometer *not* to break, when falling, *toute la même*, how small the distance; they seem bound to break. But the arrangement recommended cures them of their rather expensive habit.

Before using the thermometer, the physician should first convince himself that the upper column of mercury has not ascended above 98½°. It should always be at least 2° below that, and whenever there is any suspicion of the patient's temperature being still lower, the upper column of mercury should not be higher than about 99°. If it registers a higher temperature than is desirable, before applying the thermometer to the patient, the physician should hold it by the

Fig. 2.



middle, tightly between his fingers, and knock with his hand several times on a hard substance (a table, for instance), or, taking the instrument securely with his fingers, by the top, make, several times in succession, a downward swinging motion with his arm, when the upper column of mercury (which, I mention once more, is the only one the physician has to look at) will sink down far below 98½°. To inspect a self-registering thermometer and see that the upper column of mercury is not above 98½°, is a point which never must be lost sight of before applying the instrument. Sometimes, when there is no doubt of the patient's temperature being increased, and when the upper index column is very low down, it may be well to dip the bulb into hot water, and bring the index up to 98½° before applying it. This is only a practical hint, a proceeding to save time.

The temperature of a patient should be taken twice daily, about 7 A. M. and 7 P. M., except in special cases, when it should be recorded at certain definite times of the day, as will be ex-

plained further below. The self-registering thermometer has in its favor, that if the temperature has to be taken twice daily, the physician need make his morning visit only, when he may himself take the temperature of his patient, and after bringing, by the above-mentioned procedure, the upper mercurial column down below 98½° again, leave the thermometer with the nurse, giving her directions how and when to apply it and to put it away for his inspection the following morning, when the self-recording instrument will inform him how high his patient's temperature was the night before. It is hardly necessary to mention here again that the instrument will only so long truly record the patient's temperature as it is not brought in contact with a still higher temperature than the one it is registering. If, for instance, the patient's temperature was 104°, and the nurse should lay the thermometer, even for a second only, on a hot stove, the physician must not be astonished to find it registering the temperature of the stove, or 115°, *i. e.*, as far as the column of mercury possibly could ascend.

No matter how the thermometer is applied, the application should last fully ten minutes. I specially caution physicians never to disregard this rule. Experience has often taught me that the index column in the last of the ten minutes would still ascend one degree or more, while after ten minutes I never have been able to observe an increase, except in cases like malaria, where the temperature often rapidly ascends in a very short time. But to determine the patient's actual temperature present, the application of the thermometer for ten minutes is sufficient, but necessary.

There are three ways in which, usually, the thermometer is applied: in the mouth, the rectum, or the axilla. Some prefer one way, some the other. But it is not always a matter of preference. For various reasons, as infection or danger of breaking (the patient's condition being such that he may bite the instrument with his teeth) the thermometer can frequently not be applied in the mouth, which is otherwise, if no special cause exists against it, a very good way of determining the actual temperature of the patient's body. The bulb must be put under the tongue and the lips closed over the thermometer, while the hand of the patient, physician or nurse holds the upper part of the instrument with the fingers. The patient is informed that he can swallow the saliva necessarily collecting during this procedure in his buccal cavity, but that he should do so without biting on the instrument, and without parting his lips. In most cases, however, where the patient is confined to his bed, the temperature is taken in the axilla. In such a case, the bulb and nearly the whole thermometer must be carefully laid deep in the armpit, and the arm pressed against the chest, so that the instrument is entirely surrounded by folds of the skin, and its upper part only to be seen. The patient should then be carefully covered by his under clothing and bed covering, while, for the purpose of greater security, the physician or nurse holds the point of the instrument between the fingers, as one can feel, this way, if the thermometer is well imbedded in the axilla and in intimate contact with the skin. But there are cases where the thermometer cannot be applied in the mouth, and where its application in the axilla would not give the correct temperature of the body. This happens in sunstroke, for instance. Here the patient is unconscious, and the application in the mouth would be attended with danger. But after the whole body has been rubbed with ice, or been lying in a bath of cold water for some time, it would necessitate a very long application of the thermometer in the axilla, ere it would indicate the actual temperature of the body. In such, and other instances, where, for some reason or other, the application can neither be well made in the mouth, nor in the axilla, the thermometer, after having been oiled sufficiently, is pushed into the rectum. It answers the purpose, if a little more of the instrument than the bulb is introduced. I remember especially, one grave case of sunstroke, where, notwithstanding rubbing the patient for about an hour, with ice, and throwing ice water over the chest (a bath could not be procured) unconsciousness still continued. The patient was rubbed thoroughly dry and a colleague present took the patient's temperature in the axilla. After having held it there securely for about ten minutes, the thermometer indicated 97°, and the physician who had not seen the case from the beginning expressed doubts as regards my diagnosis of sunstroke, and spoke of apoplexy. I quietly took the instrument, and after oiling it, pushed it up into the rectum. Within six minutes it recorded a temperature of 108°, and a somewhat sour smile crept over my colleague's face. Continuing, then, our process of cooling for about three-quarters of an hour longer, we had the pleasure of seeing the patient revive. While this case shows the necessity and importance of determining the actual temperature of the internal body, there are occasions when it is important to show the exact temperature of a certain limited part of the surface of the body.

For instance, to detect, in a case of hemiplegia, any difference between the temperature of the paralyzed and the non-paralyzed arm or leg, or to find out the temperature of a still more limited place, as in localized inflammations of the convolutions or other parts of the brain, there is a special *surface* thermometer made use of. The only difference between this and a common self-registering thermometer consists in the fact of the bulb containing the mercury being flat like a button in the surface thermometer, and being fastened, by a simple contrivance, into a leather strap, so that when the strap is tightened around the head, trunk, or a limb, the button-shaped bulb of the thermometer will be in intimate connection with and pressed on to that part of the skin where the local temperature shall be determined, while the upper part of the thermometer, with its scale, stands upright at right angles to the surface. These thermometers are also self-registering. They are very convenient for taking the surface temperature, or the temperature at any definite locality, as the physician needs not to hold the instrument between his fingers for ten minutes—the same length of time being, of course, here required, as in other cases; and as the button-shape of the bulb permits a better contact of the mercury with the skin, a more accurate measurement of the degree of heat is possible. The reader will see, from this, that a physician should be in possession of two self-registering thermometers; of the usual one, first described, and of the so-called surface thermometer. The latter, being rarely used, he need not carry it always about him, but may keep it in his office till occasion arises.

To recapitulate: A physician, when buying a self registering thermometer, should have it tested at the Harvard Observatory, if it is not accompanied already by a similar reliable certificate. If he does not wish to break the instrument frequently, he has a special pocket made for it, like the one described above. Before using the thermometer, or, if leaving it with an attendant to have the patient's temperature taken during his (the physician's) absence, he must always first convince himself that the upper (index) column of mercury registers less than 98½° (the normal temperature of the healthy human body), and should it not do so, bring the column down by the procedure mentioned. Usually, the thermometer may be applied in the mouth; if this cannot be done, in the axilla; and in certain cases, in the rectum. But no matter how the temperature is taken, the observation should be made at least twice daily, and for a period of not less than ten minutes each time. I may add, that the physician will do well to keep a record of all his cases, and that the number of respirations and pulse beats be noted each time the temperature is taken. For the small outlay of one dollar only, a record book can be bought, specially prepared for this purpose, and arranged for one hundred cases.*

We come now to an important question: Of what assistance is the clinical thermometer to the physician? And I answer, it is invaluable as regards diagnosis and prognosis. Certainly it will be impossible for me to mention the temperature record of every affection, but I will give in the following the most frequent diseases in which the use of the thermometer will prove of great value to the practicing physician.

A patient who has been losing flesh somewhat, of late, and been troubled with a short, dry cough, which no remedy seems to be able to remove totally, but in whom the physical diagnosis gives a negative result and indicates apparently a mild bronchitis only, which, however, cannot be cured; such a patient is in our charge. For a few evenings his temperature is taken in the mouth, or in the axilla, at about 6 P.M., and what do we find? The thermometer records regularly 99° to 100°. If no other cause exists for this regular nightly increase of temperature, the case can surely be put down as one of incipient tubercular phthisis, and if there should be a history of tuberculosis in the family, the diagnosis becomes a certainty.

The physician is called to a patient whose teeth chatter, who has had a chill. He may have been perfectly well before, or been so the day before, but had a similar attack one or two days previously, or there may be no history of any preceding illness whatever. The question arises: Is this a case of nervous chills, of hectic fever, of ague, or of syphilitic or urethral fever; or is somewhere internal abscess formation going on? The thermometer is applied, and, as all instruments of precision, its record reveals the truth. While the skin apparently is cold, the temperature rises to 105°, later to 106° and 107°, and during the stage of sweating the thermometer shows a decline of the temperature of 2° every ten minutes, till it has reached about 98° or ½° below normal. Herewith the diagnosis is decided; this temperature record, this rapid, great rise and decline, is only found in intermittent fever, due to malaria, and in no other dis-

* The Physician's Clinical Record, for Hospital and Private Practice, with Memoranda for Examining Patients, Temperature Charts, etc., etc. Philadelphia: D. G. Brinton, 115 South Seventh Street. 1881.

ease. The indication for quinine is given, and the fears of the patient and his relations can be at once dispelled by a favorable prognosis.

A lady has a common bronchitis. After this has progressed as usually, for four days (I describe a case as it actually occurred in my practice, and I may mention here that all the instances given are taken from actual life), she suddenly complains of severe pain in the lower part of her abdomen, which is tender. There is no tympanitis, no wiry pulse, no Hippocratic face, no vomiting, and the pain disappears again after the application of leeches and the appearance of the menses. But the thermometer recorded a temperature of 105°, and whenever this happens suddenly in connection with the abdominal symptoms this patient had, even if they should leave again, this increase of bodily heat denotes mischief, denotes a lurking, fatal peritonitis. So it was in this case. Though the symptoms were by no means grave after the cessation of pain and tenderness, forty-eight hours later sudden collapse set in, and death took place almost before I reached the patient, who lived only a ten minutes' ride away from me. The post-mortem revealed what I had told her relatives: the peritoneal lining of an old pelvic abscess, which had been encapsuled for years, inflamed, in consequence of the same exposure to cold which had given origin to the bronchitis. Then the abscess "pointed" and burst into the peritoneal cavity, which fatal accident caused the sudden rise of the patient's temperature. As after the application of the leeches and the appearance of the menses the symptoms all left, and the case had by no means a fatal aspect, I would have made myself ridiculous and injured my reputation, by a favorable prognosis, from the giving of which only the thermometer saved me, its record of 105° warning me of the approaching dissolution.

A young man, who for some days has been complaining of general lassitude, pain in his limbs and his head, and who perhaps had slight epistaxis also, is feverish one evening, and sends for the physician, who does not know what is wrong, but who employs the thermometer, and finds a temperature, say of 99°. The next morning the patient feels better; his temperature is 98½°. Being a careful man, the doctor leaves the thermometer with the patient, giving full directions to have the latter's temperature taken the same night. On his visit the day after, the doctor sees, from the self-registering instrument, that the patient's temperature had been 100° the night before, while it is perhaps 99° at his morning visit. Keeping a record of the case, the doctor observes, say by the seventh day, that his patient's temperature had been as follows every night (decreasing every morning from ½° to 1° from the temperature of the night before): first night, 99°; second, 100°; third, 101°; fourth, 102°; fifth, 103°; sixth, 104°; seventh, 104°. From this fact alone, even if diarrhœa, tympanites, and eruption have not made their appearance as yet, or only moderately so, the physician knows that he has a case of typhoid fever before him, as only this disease gives the temperature record described. The temperature will now be stationary, *i. e.*, in a moderate case, 104° at night, 103½° in the morning, till the thirteenth or fourteenth day, when it will decline about as follows: —

14th day,	morning,	102½°	night,	103½°.
15th "	"	101½°	"	103 °.
16th "	"	101 °	"	102½°.
17th "	"	99½°	"	102 °.
18th "	"	99 °	"	101 °.
19th "	"	99 °	"	100 °.
20th "	"	98½°	"	99 °.
21st "	"	98 °	"	98½°.

i. e., the temperature will fall in the morning sometimes 1° to 1½°, or even 2°, but creep up at night to near the same height as the night before, until the twenty-first day, when it has reached the normal, or below it. The following points are of importance regarding diagnosis and prognosis. If after the twenty-first day the temperature continues high, say 103° or 104°, it always denotes one of three things: either a longer continuance of the fever, or a relapse, or mischief within the chest, mostly tubercular deposits. If from the eleventh to the nineteenth day the temperature suddenly declines 4° to 6°, hemorrhage from the bowels, due to corroding of a blood vessel, is sure to follow within six to twelve hours. Oozing hemorrhages are generally accompanied or succeeded by a fall of the temperature of 1° to 2°, mostly immediately after the setting in of the hemorrhage. In typhoid fever a temperature of 103° indicates a mild case; of 104°, a moderately severe; 105°, a grave; 106°, a very doubtful prognosis; and 107° a fatal case. If, during the second week, the morning and evening temperature record are alike, if no decline of at least ½° in the morning takes place, the prognosis is the very worst possible. Such cases end invariably with death, and the same holds good of any other disease.

Just as typhoid fever is characterized by this slow creeping up of the temperature in the first week, its continuance at the height reached during the second week, and its ups and downs

in the third week, so typhus has its peculiar temperature record. Here the temperature reaches its height, 104° to 105°, within twenty-four or thirty-six hours; latest, however, by the third day. Then it continues at that height, with slight morning remissions of about ½°, till the eleventh or thirteenth day, when it falls to the normal just as rapidly as it rose, generally within twenty-four or thirty-six hours, a sweat or a long sleep—a crisis—ushering in the favorable termination. Wherever this temperature record exists it invariably means typhus.

A child is suddenly taken ill with a chill, vomiting, hot skin and a very rapid pulse. The physician is called immediately, and the thermometer records 105°, or anywhere up from this even to 110° and 112°. This always denotes scarlet fever, as there is no other disease of childhood where such a high temperature is developed with such a rapidity. Usually the thermometer indicates 105° to 107°, and from this fact alone, even without the sore throat, and ere the eruption has made its appearance, the diagnosis of scarlatina can be made.

Perhaps, without any premonitory symptoms, a person is seized with a chill, followed by rapid breathing, a dull pain in the chest, cough, high fever, and a comparatively slow pulse. If the thermometer indicates a temperature of 104° or 105°, while the pulse does not beat over 110 a minute, but the respiration is rapid, the diagnosis of acute, croupous, or lobar pneumonia, will always be accurate. There does not exist any other disease where a rapid breathing and such a high temperature are connected with so slow a pulse; or, in other words, where the number of respirations, degrees of temperature, and pulse beats, do not correspond with each other. Often the frequency of the pulse will not be increased at all, or only by a few beats, and it is not rare to find cases of acute pneumonia with a pulse rate of 84 to 90. The fact is well established, that if the pulse exceeds 120 beats in the minute, the case will certainly end fatally. If in a case of bronchitis the breathing suddenly becomes more difficult and the temperature rises to 103° or 104°, it is an indication of catarrhal pneumonia having set in. If in a case of chronic pneumonia, or at that time of acute pneumonia when resolution should begin, the same sudden rise of temperature takes place, it denotes breaking down of the lung tissue. Should, in a case of pleuritic effusion, the temperature suddenly ascend to about 104°, then fall during the following sweating about 2½°, and a similar rise and decline happen daily at almo t the same hour, we know that the effusion of serum has changed into one of pus, that the case has become one of empyema, while a similar temperature record accompanies galloping phthisis and the hectic fever of common tubercular consumption. In all cases of suddenly developing severe inflammations of internal organs, or of breaking down of their tissue, or of internal formation of pus, the thermometer will reveal to us the lurking danger; without its recording a high temperature, the apparently grave symptoms lose immediately their perilous aspect. A hysterical female, suffering, for instance, from acute articular rheumatism, may suddenly complain of intense headache and be wandering in her mind; or she may have a severe pain in her chest, be breathing with difficulty, and the heart beating irregularly; but if the thermometer does not indicate a sudden rise of temperature in either case, the complication of cerebral rheumatism on the one hand, and of endocarditis on the other, may safely be excluded.

Suppose a physician is called to a lady, suffering from intense abdominal tenderness and pain, and vomiting. Peritonitis seems to be threatening, but no matter, how, and how long and carefully applied, the thermometer does not register more than 98½°. What does this denote? That this is one of the protean forms of hysteria simulating peritonitis, where the thermometer alone can tell the truth; assafœtida, valerian, and such remedies, will soon remove the apparently grave illness.

A man, during the heat of the summer months, suddenly drops down, unconscious. Is it apoplexy or sunstroke? In the former, the temperature sinks below the normal, generally to 97°, but may fall to 95°, and what is important to know, if, after creeping up, it should again decline, then such fall indicates that more blood is oozing out, that another hemorrhage is still more compressing the brain; while in a fully developed case of sunstroke the thermometer will never record less than 107° or 108°. And as in apoplexy the renewed fall of the temperature generally means death, so in sunstroke, a gradual decline to the normal (but here, for reasons mentioned above, better tested in the rectum), indicates returning consciousness and probable safety.

In cases of apoplexy, local inflammation, abscess or tumor of the brain, the seat of the lesion can often be detected by the use of the surface thermometer, which will indicate an increase of temperature of 1° to 4° over the diseased part. In hemiplegia the affected side shows, usually, a small decline of temperature, as compared with

the healthy side, excepting lesions of the thalami, where frequently a remarkable increase of temperature is observed. In paralysis, connected with a morbid condition of the anterior cornua, and in cases where the blood supply to a part has been cut off, therefore, in all cases of decided trophic disturbance, the temperature of the implicated limb will often be from 4° to 10°, and more, below the normal. I remember the case of a lady whose left arm felt numb, was the seat of severe shooting pains, and could not be raised by the patient. The case puzzled me very much; the lady complained also of a tingling sensation, and the arm had a bluish white color, but was as yet neither swollen nor emaciated. I could not feel the radial pulse on that arm, but the patient informed me that since childhood she knew of this anomaly of the course of the artery. I felt the brachial artery beating, but very weakly. Sensation was diminished, electro-muscular contractility normal. The surface thermometer recorded only 85°, while the temperature of the right arm (the thermometer being applied to each arm, on the inner side of the biceps) was 99°. The blood supply was here evidently disturbed, and the cause of all the symptoms. A few months later an aneurism of the subclavian artery became plainly visible, and proved the correctness of the diagnosis.

There are many occasions, when a clinical thermometer, or a surface thermometer, gives us valuable information; and, in fact, sufficient observations have now been made to enable us to state of almost every disease its own peculiar temperature record. I selected a few only, to show the great value of this instrument to the practicing physician, be he living in city or country. The thermometer should not be considered an instrument, as the æsthesiometer or dynamometer, which are mainly made use of by specialists, and in colleges, for demonstration only, and for which other means can easily be substituted: no, the thermometer should form part of the physician's armory, as the stethoscope, the speculum, or the forceps do. Besides, if permitted, I would give every physician the advice to keep and *use* in *every* case of illness every modern mode of investigation or treatment. How often has it happened, that the fact alone of the consulting physician taking out his thermometer, or stethoscope, which the attending doctor had not thought necessary to employ in that case, gave to the first reputation, and caused the people to talk about what kind of operations the consultant had performed, and what a wonderful man he was; how he inquired after the urine, and analyzed it chemically and with the microscope, finding its specific gravity with the urometer; how he listened to the heart with the stethoscope, percussed the chest with a hammer and plexiimeter; how he took the temperature with a self-registering thermometer, tested the strength with the dynamometer, and sensation with the æsthesiometer; tried electro-muscular contractility with the Faradic battery; and with the galvanic brush, electro-cutaneous sensibility, etc., etc. Certainly it is not this reason which should induce every physician to employ every and all known means of investigation and treatment to make other persons acquainted with them! No, it is the duty the physician owes to his patient which should stimulate him to try all means modern science has put at his disposition. How many a physician has never used a hypodermic syringe, and how frequently did Dr. X. try to remove a colicky pain, or to cause sleep in delirium tremens, which his more careful and shrewder colleague, Dr. Z., when called in after Dr. X.'s means had failed, stopped within a minute or two in the one, and induced as rapidly in the second case, by one hypodermic injection of morphia.

We hope to have achieved with the foregoing at least this result; persuaded some physicians who had not been regularly using a thermometer to do so now, given them the information necessary to make them familiar with its employment, and stimulated further inquiry.

Hospital Reports.

JEFFERSON MEDICAL COLLEGE HOSPITAL.

CLINICAL SERVICE OF WM. THOMSON, M.D.
Professor of Ophthalmology.
Reported by H. F. HANSELL, A.M., M.D.

Four Cases of Traumatic Sympathetic Ophthalmia

CASE 1.—Richard Ward, aged fifty-five. First presented himself at the clinic July, 1880. Three months earlier received a blow in the left eye from a small stone, while working in a mine, and six weeks afterward the right became inflamed. On the injured eye was a cicatrix extending from upper and outer section backward over ciliary body. Double iritis, with posterior synechiæ. Ordered atropia sulph. gr. iv to ℥ j, several times a day, after bathing the eyes with hot water. Both eyes improved somewhat under this treatment. Iridectomy was proposed, but on account of the excessively hot weather, was postponed until fall. In the fall he went, by mistake, to Wills Hospital, where an iridectomy was performed on the right eye, March 25th, 1881. Returned to Jefferson Hospital with little more than light perception in either eye. Both irides

bound fast to cornea and lens capsule; anterior chambers almost completely annihilated, and pupils clogged up with lymph. Iridectomy upward and inward, by Dr. Levis, followed by improved vision laterally. One week later an iridectomy on the other eye, followed by about the same result. On May 17th went home, nearly blind, for the new pupils had become occluded. October 17th returned; right, indistinct light perception, and left but little better. Partial cataract diagnosticated in both eyes. Iridectomy of left, by Prof. Thomson, downward and inward, with the effect of greatly improving the vision.

Case. 2.—Richard Black, aged twenty-five; admitted to house October 1, 1881, with following history: Fifteen years before, left eye was struck with piece of coal, followed by gradual loss of sight, accompanied, however, by no inflammatory symptoms, except for brief period after injury, until two years ago became absolutely blind, losing even light perception. One month before admission right was burnt by hot iron. On admission, left cornea clear. Traumatic iridectomy and cataract. T-2. Right, slight scar on cornea. Vision=$\frac{20}{LXX}$. Nerve injected and with indistinct borders. T. normal. Slightly sensitive over ciliary body, under duboisia right was tested and vision improved to $\frac{20}{XXX}$ by + 1.5. October 13th, left enucleated by Prof. Thomson. On second day vision in right began to improve, until, when he left the hospital, ten days after the enucleation, it had reached the normal acuity.

Case 3.—Alfred Darnley, aged sixty-three; struck in right eye eight years before coming to clinic. Severe pain and inflammation followed the blow, and some weeks later same symptoms developed in left. Lens had been extracted in right; iridectomy upward. Left, iridectomy downward. Vision on admission, right $\frac{20}{CC}$, left $\frac{20}{LXX}$. Ordered atropine one week. Returned with vision = right $\frac{6}{CC}$; left $\frac{20}{XL}$; vision in right brought to $\frac{20}{XL}$ by correcting for the aphakia and traumatic astigmatism. Left could not be improved with a glass. The above corrective he has worn for several months, to his complete satisfaction.

Case 4.—Sarah Garrity, aged nine. Presented herself October 28th. Was struck on left five years before, with an oyster shell. Vision completely lost. Three months ago right became sympathetically inflamed in its anterior part, and *one month* later left was enucleated. Since then vision in right has constantly decreased, until now she can only count fingers at two feet, and then only when held before window or other means of illumination.

Sympathetic ophthalmia holds a place in the domain of eye surgery second in importance to none. In this affection the sight of one eye is not alone to be considered, as in cases of cataract, occlusion of the pupil, corneal opacities, etc., but the total and irrevocable blindness of the patient. Cases of injury of the eyes are not infrequent. Indeed, by those who practice in the cities, or in the neighborhood of large mills, or foundries, or chemical works, they are constantly met with. How important, then, is their early diagnosis and correct treatment. The disease often develops from the slightest and most unexpected causes, *e. g.*, iridectomy or cataract extraction operation, and it behooves every surgeon treating a case of traumatism of the eye to be constantly on the watch for signs of sympathetic disease, and at the very first indication of *irritation* in the sound eye, to be prepared to operate, for after the stage of irritation has passed and *inflammation* taken its place, it is too late, and blindness is the result. Too much emphasis cannot be laid upon this principle. If any error must be made, let it be a too early enucleation rather than too late, and the accusations of conscience which will surely follow an opportunity of saving sight lost through culpable carelessness or inexcusable ignorance will be avoided.

But how does sympathetic ophthalmia make itself known, and by what symptoms is the surgeon to recognize it? Let us consider, then, its principal symptoms, as illustrated in the above cases.

The Ciliary Body.—Under this term I include the ciliary muscle in both its longitudinal and circular fibres; the ligamentum pectinatum, the zone of Zinn and the iris. The last is not generally classified as part of the ciliary body, but as it participates in the disease under consideration at almost the same time, and in the same manner, for clearness sake it shall be described as a part.

In Cases 1, 3 and 4, the ciliary body played the most important part in the sympathetic disease. In all, the iris was bound down fast to the anterior capsule and the pupil occluded by the products of the inflammation. The evident disease here, then, was plastic iritis, and as sympathy was the cause, we have every right to infer that there was also a plastic inflammation of the whole ciliary body, that the identity of the muscle was lost in the mass of exudation and that the function of that part of the eye was abolished. Microscopical examination of eyes sympathetically destroyed has shown that plastic cyclitis and plastic iritis have been the processes which have taken place in the ciliary body.

At the London International Medical Congress, August, 1881, Prof. Brailey said: "The uveitis which is so strikingly manifest in the well marked and severe cases of this disease presents certain definite pathological characters by which it can be distinguished histologically from other forms of inflammation. These characters, though they differ a little at different parts of the uveal tract, are nearly always recognizable in both eyes; though in the sympathizing eye the disease often, as is well known, begins as an iritis serosa with accompaning keratitis punctata, yet here also the peculiar characters of sympathetic ophthalmitis usually become visible at a later stage. The disease is not transmitted from one eye to the other by the passage of *structural change* along either optic or ciliary nerve."

How soon does this inflammation develop after the receipt of the injury? In the above cases the interval was different in each. In the first, six months; in the third, "some weeks"; and in the fourth, almost five years. Much depends upon the nature and severity of the injury and the part of the eye involved. If, for instance, a foreign body, such as a piece of iron, which would undergo chemical decomposition, were

lodged in the ciliary body, the initial inflammation would be more severe and the sympathetic inflammation sooner supervene than if the body were not capable of becoming chemically decomposed and were lodged outside of the ciliary body; or, again, if the substance inflicting the injury expended its force on the cornea, with only secondary involvement of the ciliary region, the second eye would suffer at a later period than if the ciliary body were primarily wounded. So that each case is a law unto itself, and we must be guided in our prognosis and treatment by, first, the constitution of the patient, age, habits, etc.; second, the character of the material causing the wound; and third, the position of the wound and the structure implicated.

The Optic Nerve.—The second case illustrates the second variety of sympathetic inflammation, in which the brunt of the inflammation is borne in the secondarily affected eye by the optic nerve and retina. The ciliary body, however, was not free, as was shown by the sensitiveness on pressure over the ciliary muscle. The patient complained of photophobia and *the gradual deterioration of vision.* On inspection no signs of inflammation could be detected in the anterior half of the eye; cornea clear, except slight opacity from the burn; iris responsive to light and mydriatics; no discoloration, no adhesions, either to cornea or lens capsule; no cataract, no loss of accommodation, no vitreous opacities. Then it may well be asked what was there to indicate that the eye was suffering from "sympathy" with its fellow. First, the optic disc was hyperæmic, its edges were obscured; the lamina cribrosa was invisible; the veins and arteries filled to their utmost capacity; and second, the complaint of the patient that his sight was gradually failing. The result of the enucleation clearly proved the diagnosis to have been correct. Before operation the vision was, by the aid of a hypermetropic glass, a little better than one-half. Ten days afterward, by same glass, vision was improved to normal, or $\frac{20}{xx}$, and the photophobia had disappeared. The period of incubation, if I may be allowed the term, was very long, nearly fifteen years, and, in this, differing in another essential particular from the three other cases.

Thus we see the symptoms and signs of sympathetic ophthalmia differ according to the localization of the disease, and may be classified under two heads:—

1. Anterior. Sensitiveness over ciliary body, particularly the superior portion; gradual failure of accommodation or early presbyopia; iritis and its consequences.

2. Posterior. Optic nerve hyperæmia, neuritis, neuro-retinitis, retino-choroiditis, hyalitis.

The two most conspicuous complaints of the patient are pain, gradual loss of sight.

At one time it was the almost unanimous opinion of ophthalmologists that the sympathetic influence was conveyed by the optic nerve; later the optic nerve theory was abandoned and the ciliary nerves accused of doing all the mischief. But now the two conflicting theories have met on a common ground, and it is believed that the disease is transmitted by both the optic and the ciliary nerves, or sometimes by one, sometimes by the other.

On this subject, Prof. Snellen addressed the Ophthalmological Section of the International Medical Congress, held in London, August, 1881, and suggested—

1. The explanation of sympathetic ophthalmia as a reflex irritation of the ciliary nerves, is not sufficient—

2. As a clue to further research, the hypothesis recommends itself, that sympathetic ophthalmia is to be regarded as a metastatic specific inflammation, in which special parasitical inflammatory elements are conveyed over to the choroid of the sympathizing eye through the dilated lymph paths.

In conclusion, I quote from Mauthner* his views in relation to the time in which sympathetic inflammation is developed, and his four strongly emphasized rules as to the proper time for operation.

"It is an important question, how long a time must elapse until the condition of irritation advancing along the nerve tracts reaches the second eye. Let it be understood at first that it is not possible to state the *latest* time for the development of the disease.

"In one eye destroyed through traumatism, the possibility of its influence on the second persists not only during the time when the first is painful, but even when a foreign body has remained innocuous in the interior of the eye for an indefinitely long time, may be finally called forth. It can, further, in a phthisical bulbus, which, on account of absence of every symptom of irritation appears a perfectly harmless neighbor, from unknown causes, or through formation of bony plaques in its interior, give origin to new painfulness, and thus open a posthumous source of irritation; and finally, there is not the slightest doubt that the germ of a sympathetic inflammation can lie dormant in a *painless* eyeball an undeterminable length of time. Indeed, the literature contains records of cases in which the sympathetic inflammation has developed only after periods of ten, twenty, and even fifty years. Much more important is it to decide the *earliest* time. In this respect it appears to us there is a relation between the length of time and the cause. *A priori*, we cannot measure the time. We have no sure means of knowing how much time must elapse before the diseased condition in the ciliary and optic nerves is transmitted to the opposite side, and although the early appearance of neuro-retinitis in the *wounded* eye is proven, we are still ignorant as regards the ciliary nerve, how long it continues before the same would place that eye in the necessary condition of irritation. *A priori* we must believe that the sympathetic neuro retinitis must develop in a shorter time than the sympathetic cyclitis, since the tract over which the inflammation must travel is much greater in the latter than in the former. Yet we cannot say that experience corresponds with this expectation. As a rule, one month to six weeks is the interval between the primary and induced inflammation."

Finally, the observations in respect to the ope-

* *Vorträge aus dem gesammt gebiete der Augenheilkunde.*

ration: "It *may* be undertaken as a prophylaxis; it *must* in stages of irritation; it *must not* in iritis serosa and plastica; it *can* (if the sympathizing eye is entirely blind, and not in a condition of active irritation) in irido-cyclitis plastica."

Accepting Mauthner as authority, we learn that enucleation is forbidden after the development of iritis serosa and plastica. What, then, shall be the treatment in that stage? Whatever is possible to be done will be accomplished by an energetic medicinal course; mercury in small doses, carried to ptyalism; rest in bed; mydriatics; leeches; hot water bathing; exclusion of light, and the best hygienic surroundings.

Editorial Department.

Periscope.

Cirrhosis of the Liver in Children.

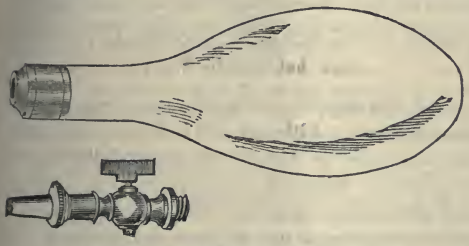
At a recent meeting of the Pathological Society of London (reported in the *British Medical Journal*) Dr. Pye Smith presented a specimen of cirrhosis of the liver which was not the ordinary hobnailed, nor the syphilitic, nor the rare form of cirrhosis due to adhesive inflammation of the portal canals, nor was it a case of so-called hypertrophic cirrhosis. A remarkable corresponding change was found in the lung and peritoneum. The patient was a boy, who was thirteen years old at the time of death; he had been ill for three years; he had the ordinary symptoms of chronic pulmonary phthisis, and also ascites and abdominal pain, which were attributed to abdominal phthisis. He died from exhaustion due to diarrhœa. The pleuræ were much thickened, and there was enormous interstitial thickening of the lungs, which contained numerous vomicæ; there was no caseous change in the lungs, or in the lymph glands, or any part of the body. There was evidence of extreme chronic peritonitis; in the pelvis the thickening of the subperitoneal tissue had formed a tumor, which consisted of indurated fat. The liver was scarred by bands of fibrous tissue; on section, irregular patches of congestion bounded by fibrous overgrowth were seen. The colon was in a condition of extensive ulceration. Microscopical examination afforded conclusive evidence of a true interstitial hepatitis. There was no history of any over-indulgence in spirits; there was no indisputable sign of syphilis; and careful questioning of the mother failed to elicit any family history pointing in that direction. Dr. Pye Smith did not think it could be regarded as a case of tubercular disease, for there was no trace of any caseous change, either in the lungs, lymphatic glands, or peritoneum. He thought it an instance of that tendency to a fibroid overgrowth in many of the organs, owing to some unknown cause, which was seen not very uncommonly in adults. Dr. Mahomed, who had seen the patient during life, and had witnessed the necropsy, had been struck by the amount of the cyanosis and its persistence for two years, and had made the diagnosis of chronic bronchitis, with consecutive nutmeg disease of the liver. This specimen gave rise to much interesting discussion on cirrhosis of the liver in children, especially concerning its etiology. It seemed to be the sense of the Society that these cases were the result of a tendency to general fibroid overgrowth in all the organs, due to some unknown cause. Many cases of cirrhosis of the liver have been met with, in which there was no history whatever of syphilis, tuberculosis, or gin drinking.

Wool-Sorters' Disease.

The London *Medical Times and Gazette* says: In his annual report on the health of the Borough of Bradford, for the year 1880, Mr. Harris Butterfield, the Medical Officer of Health for the district, remarks that during that period several cases of disease, known in that locality as "wool-sorter's disease," have occurred, six of which proved fatal. Although, Mr. Butterfield observes, in Bradford and its neighborhood the malady is peculiar to wool-sorters, yet the disease is not confined solely to them, but may affect all persons whose avocations bring them in contact with the tissues of animals infected with the complaint known as splenic fever or anthrax. Butchers, farm laborers, and workers in horsehair, have contracted the disease, and it is probable that many hitherto unsuspected sources of infection exist. What is yet known of the disease as it occurs in the Bradford district is due, Mr. Butterfield continues, to the research and investigation of Dr. Bell. The Sanitary Committee of the town, assisted by delegates from the wool-sorters themselves, have drawn up a code of regulations to be observed in all factories where foreign wool is dealt with, and since the adoption of these rules no case of wool-sorters' disease has occurred in any of the establishments where they are in force. In addition to the precautions agreed to, some firms require the man who steeps the bales to wear a respirator and long gloves. It is still doubtful, Mr. Butterfield thinks, whether the hairs and wools admitted to be noxious are the only dangerous materials. Anthrax, as an epizoötic, is not confined to the animals from which the admittedly dangerous hair is obtained, but is known occasionally to infect all animals. It is not because home and colonial sheep's wool is never infected that sorters engaged solely on this material do not contract wool-sorters' disease, but because the greasy nature of this description of wool prevents the germ bearing particles from floating in the atmosphere.

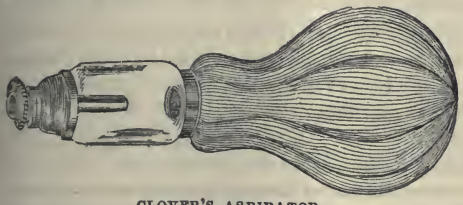
Lithotrity at a Single Sitting.

The London *Lancet* of January 7th, 1882, contains a lecture by the eminent English surgeon, Sir Henry Thompson, whose name has become indissolubly connected with this operation, and from it we quote the salient points. He always commences his lectures on lithotrity by sketching its brief history, which differs so widely from that of lithotomy, which dates back some twenty centuries. The first efforts to crush a stone were made early in the present century, and culminated in the first performance of the operation by Civiale, in 1824. After a considerable interval, during which the operation underwent many modifications, it was proposed by Heurteloup to remove débris on a large scale, and complete the operation at a single sitting, but he did not succeed in this. Before this time, Sir P. Crampton, of Dublin, had invented an apparatus like a large soda water bottle, from which, by means of an exhausting syringe, he removed the air and then applied it to a large silver catheter previously introduced into the bladder. Some twelve or fourteen ounces of water had been injected into the bladder, so that on turning a tap attached to the receiver a powerful rush into it of water and débris took place. This was the first aspirator.



SIR PHILIP CRAMPTON'S ASPIRATOR.

This, however, was found to be too rough in action. Soon afterwards Mr. Clover designed an india-rubber aspirator with a glass cylinder, which answered very well.

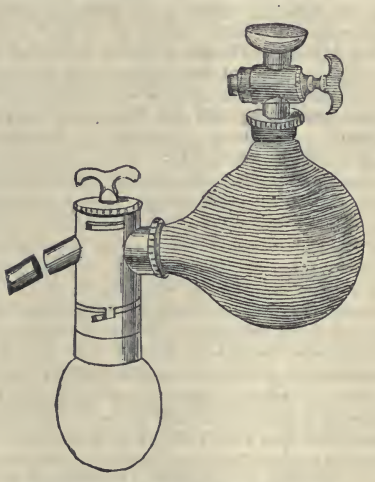


CLOVER'S ASPIRATOR.

In 1878 an important change was proposed by Professor Bigelow. He advised that the stone, however large, and without respect to any collateral considerations, should invariably be removed at one sitting, by the use of more powerful lithotrites, larger evacuating catheters, and a stronger india-rubber bottle than had before been used. Professor Thompson has now resorted to this method in 101 cases, and regards it as a valuable improvement on any method previously employed. In describing the operation, he says that a stouter lithotrite, and one which will bite into a hard stone and *break* it into fragments first, instead of *crushing* it into débris, is preferable. When a stone of medium size has been broken up, and by repeated crushings during some eight or ten minutes is obviously reduced, or nearly so, to débris, the lithotrite should be withdrawn and an evacuating catheter, Nos. 15, 16, to 18, according to previous examination of the urethra, should be introduced into the bladder, when urine and some debris will be expelled. To this catheter the aspirator is next to be applied.

He found the following points essential in determining on the kind of aspirator to be used:—

1. It should be light and small, so as to be easily grasped and managed by one hand.
2. It should have an opening *at the top*, by which it can be filled with water, to which all air accidentally admitted, if any, will arise, and by which it can escape.
3. Its *lower part* should be connected with the evacuating catheter by the shortest route to the bladder, and in such a manner that the aspirator can be detached with ease, and without loss of any contained water in so doing.
4. There should be a trap into which all fragments must fall, and by which they are securely retained. Such an apparatus is shown in the accompanying figure.



SIR HENRY THOMPSON'S ASPIRATOR.

Recent change in the situation of the trap.

The aspirator being attached to the evacuating catheter, alternate pressure and expansion takes place, in obedience to the hand of the operator, who at the same time modifies the position of the catheter according to his judgment on observing the arrival of small fragments and débris in the trap. When much has come over, perhaps only a large piece or two being felt, which evidently cannot issue, the aspirator is removed and a lithotrite introduced, and they are crushed, when the aspirator is again applied and the bladder is completely emptied. This operation must be repeated as long as fragments remain. In from ten to forty minutes a uric acid calculus of considerable size may be thus broken up and removed. He has never consumed more than fifty minutes.

Micrococci in Lupus.

The London *Lancet*, speaking of this subject says:—

The domain of microphytes is fast extending its limits. It is not long since leprosy was declared to be due to their development; syphilis and tuberculosis are believed by many to be largely due to them, and now lupus, an affection which has some undoubted affinities with tubercle, has yielded to Max Schüller, of Griefswald, evidence of micrococci mingled with the cell products. His conclusions are given in a short paper in the *Centralblatt für Chirurgie*, No. 46, a reprint of which is before us. The paper is entitled "Histological Studies on the Micrococci of Lupus," and the author says that, for more than a year he has diligently examined every specimen of lupus he has been able to obtain in the recent state, for these organisms. At first he met with not very satisfactory results, due, he thinks, to the fact that he sought for them in the main mass of cells composing the lupus nodule, and also because of the staining material he used. Improved methods yielded better results. To guard against the intrusion of micrococci from without, the freshly extirpated lupus masses were placed at once either in 2 per cent. aqueous solution of carbolic acid, or treated with 3 per cent. solution of the acid in absolute alcohol. These preparations were then cut by Roy's freezing microtome, either at once or after being left a longer or shorter time in the carbolic solution, which was frequently renewed. The sections were then placed in alcohol and stained by Weigert's method, by 1 per cent. aqueous solution of gentian-violet, and, after sufficient staining mounted in oil of cloves or in glycerine. Only the best and most carefully stained sections were examined, and that under high powers, with concentrated illumination. The smaller nodules lying outside the chief focus in the subcutaneous connective tissue were the best to be examined for micrococci. These nodules, composed of small groups of round cells and a few pale epithelial cells with large round or oval nuclei, were the seat of micrococci granules lying between and around the cell groups. At certain points of the periphery of the nodule short rows of such granules extended into the neighboring connective tissue, sometimes reaching to the next cell mass. The micrococci were not so thickly massed in the tissues as in many acute infectious processes—*e. g.*, in acute infectious osteo-myelitis—but in well-stained preparations they were clearly and sharply defined, and could be detected in the smallest nodules lying far away from the main mass, and even around isolated epithelioid cells, the micrococci radiating from these into the tissue around. In that way stellate masses of micrococci, staining like the cells they surround, come clearly into view, amidst the unstained connective tissue. Probably, these solitary cells, surrounded by micrococci, are the smallest foci of development of the lupus nodule. Owing to the greater accumulation of cells in the completely formed lupus nodules, it is much more difficult to detect the organisms in them, but in very thin sections Schüller found them between the cells and giant cells. In one case of lupus of the lip he found considerable masses of micrococci in the centre of disintegrating nodules. Micrococci can, however, be regularly recognized at the circumference of larger lupus nodules, at places where offshoots of cells spread like roots into the surrounding connective tissue, the extremities of such processes being surrounded by the granules, less closely arranged than in the isolated foci before mentioned. He invariably found these also in the hyperplastic sebaceous glands within the lupus territory, and sometimes in the hair-follicles and around the sweat-glands. He also found them in the walls of the small vessels, surrounded by round and epithelioid cells. In all parts the micrococci form a more or less complete network, by the processes which their masses send out into the neighboring tissue. In a case of ulcerating lupus nasi he found micrococci thickly grouped in the hyperplastic epidermal papillæ around the ulcer. Finally, he has found micrococci in lupus most abundantly in the more recent formations and in the softer tissues, being best seen in portions of luxuriant lupus of the face, lips and nose; more sparsely in old dense lupus foci, which are now and then observed in the skin of the extremities.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——"Diseases of the Ear in Locomotive and other Engineers, Firemen, and Conductors, which may endanger the lives of the traveling public," by Laurence Turnbull, M.D., comes to us in the form of a reprint from the "Transactions of the Medical Society of the State of Pennsylvania." The paper contains many valuable suggestions, and a recommendation that the Legislature be petitioned to pass a law requiring all railroad employés to be examined for their acuteness of hearing, by means of the voice, watch, clock, bells, whistles, etc., before taking charge of a fast train on any railroad in the State of Pennsylvania.

——"Removal of a Cyst of the Pancreas." A portion of a paper read by Dr. N. Bozeman, before the New York Pathological Society. It comes to us in the form of a reprint.

——"Report of Deaths in Providence, Rhode Island, during the year 1881." Compiled by Edwin M. Snow, M.D., Superintendent of Health and City Registrar.

——Godey's Lady's Book for February, is a sparkling number. The steel plate is a beautiful sketch drawn by Darley, representing a scene in "The Cricket on the Hearth," and the novelette, "Cherry Snows," is a thrilling love story from the pen of Carrie Beebe Crocker. The shorter stories, Poems, Recipes, Puzzles, Games, etc., are all first-class, and the Fashion and Work Departments are replete with the very latest designs.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,

115 South Seventh Street,

PHILADELPHIA, PA.

SANITATION AND PUBLIC EDUCATION.

A bill introduced into the Legislature of Ohio by Hon. HARVEY RICE, furnishes food for some remarks on this very important question. School hygiene is the foundation stone of public health.

The young and growing body is profoundly influenced for good or evil by hygienic surroundings. Bad sanitary conditions may so impress the delicate organization of a naturally weak child, as to render him a lifelong invalid, and may so influence a vigorous constitution as materially to lessen his mature powers for private and public work.

It is very gratifying to find our law makers commencing to recognize the great importance of this preventive branch of medicine in connection with public education, and we most sincerely hope and trust that no time will be lost in making this bill a law, and that the good example thus set will meet with a universal following.

The bill under consideration confers upon the Boards of Health of cities of the first and second classes the authority, and makes it their duty, to cause sanitary inspection of the schools in their cities. For this purpose the Health Boards are authorized to secure the services of some physician (not a member of the Board) who shall possess the requisite qualifications, to make all such sanitary inspections, and he shall be allowed the aid of one or more assistant physicians, if necessary. The principal and his assistants shall be remunerated for their labors by the payment of such a sum as the Board shall consider just and reasonable.

The principal physician is compelled to make thorough inspections of the sanitary conditions of all the public schools, investigate any causes that may tend to impair the health of the pupils, and note any requisite hygienic improvements or modifications that may be required. All of which he shall report to the Board of Health quarterly, or oftener, as they may require.

Printed copies of all sanitary regulations approved by the Board must be furnished to the superintendents and teachers of all schools, and it then becomes their duty to faithfully carry them out.

They must also cheerfully, voluntarily, and thoroughly make any suggestions and give all information in their power, that may seem necessary to further his investigations, to the inspecting physician; and furthermore, a penalty of not less than five nor more than fifty dollars fine shall be imposed upon any one who may neglect this provision.

Bravo! this is a big step in the right direction. Every one interested in human welfare and the prevention of disease will owe Mr. RICE a vote of thanks if he succeeds in making a law of his bill.

The West is a wonderfully great country. It is rapidly getting ahead of the East in everything. This new evidence of progress tends to show that even in that development which usually comes only with age and refinement, after the bustle of development of material resources has become settled, the West is ahead of the East. It now becomes the imperative duty

of the legislatures of all our States to follow this wholesome example set them by Ohio.

There is one proposition which we desire to announce in this connection and to have remembered. The history of the world furnishes us abundant evidence of the fact that the very large majority of mankind pay no attention whatever to preventive medicine. When sick they rush off to the doctor, but they absolutely neglect the precautions necessary to prevent sickness. Well, such being the case, it becomes the bounden duty of those who have the power, to force these persons to take care of themselves, and to prevent, as far as possible, the inroads of disease, misery, and death.

We sincerely trust that before long we will have the great pleasure of chronicling the introduction of many such bills into our different legislatures. We shall await anxiously the fate of this one.

THE GERM THEORY AND SOME OF ITS PRACTICAL RESULTS.

The laborious researches of KLEBS, NAUNYN, PASTEUR and others, into the actual cause of the so-called infectious diseases, have brought some practical results already, and promise us daily more. As is well known, minute organisms—micrococci, for instance, in scarlatina and diphtheria; bacilli in typhoid and typhus—have been detected by these investigators as the cause of those maladies. Salicylic and carbolic acid and other disinfecting remedies which destroy these animalculæ would be the proper therapeutic means in such cases, were it not for the fact that they cannot be given in doses large enough to act effectually as physiological antidotes, if we are permitted to use this expression. The animalculæ generally collect in such great quantities in the system they once infect, that very large doses of these remedies are necessary to destroy them. At the same time the reproduction of these low organisms progresses so rapidly, that the means for their destruction have to be employed almost continuously, and not only large, but very frequent doses become necessary, therefore. If the acids above mentioned would be administered internally, as often, and in doses sufficient to fulfill their indication, the remedy would become almost more destructive and dangerous to the system than the infectious animalculæ, the micrococci, or the bacilli. Here we have to thank KLEBS again for an important discovery. He found that the benzoate of sodium or of magnesium destroys the bacilli of typhoid fever, while, even in very large doses, it does not act deleteriously on the system. As the bacilli accumulate in large masses, in this disease, on the mucous membrane of the nose, mouth, pharynx, bronchial tubes and intestinal canal, a strong solution of the remedy mentioned is applied to and brought in direct contact with these parts, and for this purpose it is used in form of injection, mouth wash, gargle, by inhalation, and administered internally, viz: in doses of about twenty grains every two hours, so that altogether—*i.e.* by the different modes of its application—about three hundred and twenty grams of the remedy are daily given to the patient. KLEBS cites the case of a workman in his own laboratory, who had been exposed a great deal to the bacilli, while being occupied with their culturing, and who was attacked by what promised to be a very grave form of enteric fever. But after having been treated for nine days with the benzoate of sodium, and in the manner described, the fever and every other symptom totally left him, and a rather remarkable weakness was the only sequela of which the patient complained for some weeks longer. Considering the well known reliability of KLEBS, the remedy, used as recommended, merits undoubtedly a further trial, and we draw, therefore, the attention of our readers to the same, especially as it can now be procured in our country, from almost any wholesale drug house, and as it is cheaper than either salicylic or crystallized carbolic acid.

Another practical result of the researches connected with the germ-theory is the following: PASTEUR took a drop of blood from a chicken, having died of chicken cholera, or from a sheep which had died of anthrax, and dropped each drop into a small quantity of chicken or mutton tea (prepared like beef tea), the vessels being

closed with a cotton stopper, which allowed entrance of air but no foreign particles that might be contained in the latter. These solutions he exposed for two weeks to the air, when he took one drop of each, and put this into a fresh, pure chicken or mutton tea, which then again was left for about two weeks exposed to the atmosphere. After repeating the same experiment from four to six times, he procured this way, at last, a solution, which, when in the small quantity of a few drops injected under the skin of the respective animal, would hardly produce any local and no constitutional symptoms, but protect the animal as surely against the disease itself, the "diluted" poison of which it was inoculated with, as a successful vaccination with cowpox lymph will protect a human being against variola.

The experiment has lately been tried in public, by the authorities of one department of France, and it proved so successful that the general adoption of this new form of vaccination of animals has been recommended by the government, and begins generally to be practiced in France. As especially chicken cholera is a frequent disease in our country also, it should be the duty of physicians to draw the attention of farmers to the experiments and results gained. And as pleuro-pneumonia of cattle is an infectious disease still prevalent in some parts of our country, and the same can be said of an epidemic disease among swine, it may be well for those who have the opportunity, and live in such localities, to try a similar method in these diseases, and observe if the same results may be obtained.

Here is an opportunity for some member of our profession to make his name well known all over the country. It must not be forgotten, however, that the exposure of the culturing liquid to the air for a certain time is a paramount necessity.

SHOULD SICK MEN BE HUNG?

A case out in Kentucky at the present time makes this a pertinent question. A man convicted of murder was sentenced to death, and the date for his execution fixed. During the interval between his conviction and the date fixed for execution, he was seized with smallpox. At first the Governor of Kentucky (who is a physician) said that this would make no difference, and that the criminal must hang on the day appointed. Subsequently, however, he has granted a respite of nearly a month. We imagine that most persons will approve of this last course of His Excellency. It is revolting to the natural sense of propriety in human nature to think of the hanging of a man whose body is covered and disfigured with the eruption of a loathsome disease like smallpox. Of course, there are two sides to every question, and no doubt there are many who would claim that this man should be hung on the day appointed, whether sick or well.

They would argue that it made no difference to the criminal, when about to be killed, whether he happened to be in good health or not; and they might even claim that such an execution would be doubly effective in dissuading others from becoming murderers, since the idea of hanging a probably dying man would carry a greater impression with it of the sternness and inexorableness of the law.

In this particular case there may have been a special reason for the Governor's leniency, to be found in the fear of disseminating the disease. Such precautions could have been observed, it is true, as would have rendered this danger almost *nil*, but he no doubt thought it better to err on the safe side, and in this view, he should receive the support of the profession. We would take it that such a rule as the following would satisfactorily meet the possibility of more such cases as this one arising.

Whenever a condemned murderer is taken with a contagious disease, he should be reprieved until he is well recovered; but sickness of a non-infectious nature should not interfere with the execution.

Since hanging is justifiable, because by the fear of it would-be murderers are restrained in the execution of their diabolical acts, so the more revolting and more terrible it is made to seem to them, the more deterring influence will it wield.

Notes and Comments.

Flowers in Sleeping Rooms.

Since it is a very common practice, particularly among females, to have flowering plants in their sleeping apartments, and since physicians are often asked whether this practice is injurious to health, the following remarks from the London *Lancet*, seem very timely:—

The public are again warned against the use of flowers in sleeping apartments; and wonderful stories are told of the deleterious effects which have followed their presence in a limited atmosphere respired by invalids. Curiously enough, these appalling "instances" of the evil influences of plants do not for the most part apply to flowers. Nevertheless, we agree that it is safe to banish growing plants and flowers from bedrooms. They can do no good, and they may do some harm, if only by rendering the air of the apartment irritating to the delicate lining membrane of the breath organs. We are not disposed to endorse or accept the charge brought against plants and flowers generally, but it is well to err on the side of prudence; and although it cannot be denied that these embellishments form most pleasing objects for the eye, this advantage must be sacrificed, if, as alleged, they are injurious. There can be no doubt that some plants give off noxious emanations, and others may scatter particles which prove irritating; but are all vegetable growths thus injurious? However, as we have said, it is well to be over-cautious. So flowers and plants must needs be banished, though we part with them with unfeigned reluctance.

Nitrous Oxide as an Anæsthetic During Labor.

The London *Medical Times and Gazette* tells of the recommendation by Dr. Stanislaus Klikowitsch, of nitrous oxide gas during labor. He employs a mixture of four parts to one of pure oxygen, kept and supplied under a sufficient pressure to make its density the same as that of atmospheric air. For obstetric purposes he carries it in an india-rubber bag, which he puts under the pillow of the patient. He claims the following advantages for it: 1st. Its use is free from danger either to mother or child, and it has no effect in prolonging labor. 2d. It does away with pain in all the stages of labor. 3d. Complete anæsthesia can be produced without loss of consciousness, and therefore without diminishing the action of the voluntary muscles. 4th. It does not produce vomiting, nor excitement, nor any bad after effects. 5th. The anæsthesia can be continued throughout labor without any cumulative effect, since, during the intervals of pain, the effects of the preceding inhalations completely disappear. 6. The presence of the medical man is not indispensably necessary for the administration of the anæsthetic. With the editor of the *Times and Gazette*, we must take exceptions to No. 6; it is a very dangerous and reprehensible custom to allow any one not a competent physician to administer any anæsthetic. The only objections urged against the use of nitrous oxide in this connection are its comparative costliness and inconvenience of transportation.

Calcified Adenoma of Scalp.

At a recent meeting of the Pathological Society of London, reported in the *Medical Times and Gazette*, Mr. Eve showed a specimen of this condition. It was a small, firm tumor, lobulated and encapsuled. At first it was thought to be fat. Before microscopic preparations could be made it had to be softened in an acid solution. It was then found to consist of columns of epithelial cells in a fibroid stroma. These columns varied in size; some were branched, some were tortuous. The epithelial cells were small, about the size of those found in the sudoriparous glands, having nuclei. The family history of the young man from whom the tumor was removed was interesting. His father and his father's sister had both suffered from similar tumors. These tumors resembled some which were shown at the International Medical Congress, by M. Malherbe, who described them as calcified epitheliomata of the sebaceous glands. He could not agree to regard them as epithelioma, as there was no infiltration of the surrounding tissues, no leucocytes, and the size of the cells also differed. He thought that they most resembled what English pathologists agree to call adenoma. He also showed sections of a second tumor of the same nature.

Hæmatology.

The London *Lancet* says that Bizzozero and Salvioli have been recently experimenting on the phenomena of blood formation. They endeavored to stimulate the hæmatogenic function of the spleen by copious venesection; with dogs and guinea pigs they succeeded, but failed with rabbits. As a result of their experiments, they conclude that both red and white corpuscles are formed in the spleen; though this view is in opposition to that held by Neumann and Fryer.

Cough of Tuberculosis.

Dr. Whiteway Wilkinson writes to the London *Lancet* that he has frequently been able to afford relief in the early stages of pulmonary tuberculosis by giving the patient, every half hour, alternate doses of sulphate of copper and sulphate of zinc—1.50th of a grain. Without any other drugs the cough gradually gave way.

A New Purgative.

The *Concours Médical* reports that Dr. Rabuteau has experimented with sulpho-phenate and sulpho-cresylate of soda, and has obtained excellent purgative effects with both. A dose of from 20 to 25 grams (ʒv to vj, gr. xv) will induce seven or eight stools in the course of a day. Those salts are eliminated, almost totally, without any change, and their use is advised in cases of fetid diarrhœa.

Detection of Impure Water.

Dr. John Lowe writes to the London *Lancet* about the great danger from impure water to which travelers are exposed, and suggests a practical remedy. If ten or fifteen drops of *Nessler's* test were enclosed in a thin glass capsule and hermetically sealed, the fluid would keep for a length of time. A person about traveling could supply himself with a number of these, and whenever the purity of a water was suspected, one of the capsules should be broken into a wineglass and a spoonful or so of the water added, when all doubt may be set at rest.

Clinical Lessons on Syphilis.

The *Concours Médical* accompanies a notice of the second edition of Fournier's valuable work with remarks, from which we quote:—

Syphilis in all its forms is here treated in a masterly way, and nothing can surpass the boldness and clearness with which the subject is handled. After reading this work, it would seem as if errors of diagnosis were quite impossible. All the accidents attending syphilis, all the consequences directly, or remotely traceable to it, are dwelt upon, and the importance of careful scrutiny into the previous history of the patients is demonstrated.

Sixty pages of this work are devoted, by Prof. Fournier, to the treatment of syphilis. He recommends the use of mercury, notwithstanding all that has been said, of late, regarding the uselessness and dangers of this therapeutic agent. He reviews the different ways of administering mercury, and finally reaches what he terms *his method of successive treatment.* This consists in dividing the treatment into active periods, during which mercury is administered, and into periods of rest, or disencumbrance. According to him, there is nothing excessive in leaving patients under mercurial influence for as long even as two years, including the periods of discontinuance, or rest. The general condition of each syphilitic patient will indicate what auxiliary medication is required, as mercury alone should not be administered. This is but a very brief sketch of this new edition, which contains many valuable additions not to be found in the first.

Contagious Pneumonia.

Dr. R. Jelley, writing to the London *Lancet*, details two cases in which pneumonia seemed to be contagious. He inclines to the belief that there is a contagious form of pneumonia, though he believes it to be very rare. The first case was that of a farmer, aged forty-five. He died of pneumonia. The day before his death, his wife, who had nursed him, was taken with the disease, and she also died. Her sister was confined to bed for one day, with bronchitis.

The second case also occurred in a farmer, who died. His sister, who had been in frequent attendance on him, was taken with pneumonia the day her brother died, but she recovered. All these cases were seen by a consulting physician, as well as by Dr. Jelley, so that there cannot be much doubt about the correctness of the diagnosis. A careful examination failed to disclose any cause for the second case, in each instance, other than contagion.

Boring the Ears.

The London *Lancet*, editorially referring to this subject, very forcibly and very sensibly scouts the idea that boring the ears can have any effect on sore eyes. It reminds us that the only possible influence this operation could have on the eyes would be in so far as it acted as a counter irritant, and since the wounds in the ears heal so rapidly, this argument amounts to nothing; the same, and even better results could be derived from blisters behind the ears.

Treatment of Phagedenic Ulcers.

Dr. Vidal, in *Concours Médical*, recommends:

℞. Vaseline, ʒx
Pyrogallic acid, ʒj. M.

Make into an ointment and apply, morning and evening.

Special Reports.

No. III—INFECTIOUS DISEASES.

Smallpox.

INCUBATION.

M. Marais (*Année Méd. de Caen et Calvados*) had the opportunity of studying, in several cases, the duration of the period of incubation in this disease, and found it from eleven to twelve days. He observed that variola is contagious from the début of the disease, and not alone at the period when desquamation of the pustules is taking place. According to M. Barthélemy (*Thèse de Paris*, 1880), the period of incubation may vary from the ninth to the fifteenth day, and that of invasion from thirty-six hours to twelve days.

A question that has at different times awakened discussion is, whether vaccination during the period of incubation has prevented the complete development of the disease. A case reported by Seymour Sharkey (*Lancet*, Vol. 2, 1877), would seem to decide the question in the negative, for on the eighth day of the vaccinal eruption supervened the classical prodromata of smallpox, followed, after the usual period, by the eruption. The disease ran its usual course, with primary and secondary or suppurative fever, special thermometric curve, etc.

On the other hand, M. Courtes, in the history of an epidemic observed at Adissan (*Thèse de Montpellier*, 1881), states that five persons were vaccinated, or re vaccinated during the period of incubation; one only succumbed, and this was a child, seven years of age, who was vaccinated but two days before the eruption appeared. The other four had the disease lighter, particularly those vaccinated a number of days before the eruption appeared.

THE INITIAL ERUPTIONS OF SMALLPOX.

Mr. Seymour Sharkey (*St. Thomas Hospital Reports*, ix, p. 165) divides the rash into several categories:—

(A) Erythematous rash, subdivided into several varieties: 1. Scarlatiniform rash, which is very frequently observed, and resembles almost absolutely the eruption of scarlet fever on the second day. But the erythema of variola becomes more rapidly generalized than that of scarlet fever, and does not commence on the face and neck, as does this last. Again, it is of a more uniform coloration than the scarlatina eruption, and is not accompanied by the very small elevations, due to the engorgement of the cutaneous papillæ, found in the latter disease. Finally, the inguinal region very frequently presents hemorrhagic effusions, which render the diagnosis certain, when associated with the simple erythema of the trunk. 2. Morbilliform rash is less common than the preceding. As in measles, the spots are separated by intervals of normal skin, but the face is not attacked by the exanthema, which generally disappears suddenly at the moment of the eruption of the smallpox pustules.

These two last erythematous eruptions are generalized, affecting the entire cutaneous surface; those which remain localized are less well known. With Simon, of Hambourg, Mr. Sharkey insists on a form of erythema which remains limited to the extensor aspect of the limbs, for instance, over the olecranon and the patellæ. Our author reports a case of this kind, where there existed, conjointly with variolic pustules of the face, large red patches over the tibiæ, around the knees and along the extensor surface of the forearm.

Sometimes, but not often, this form of localized rash affects exclusively the flexor surfaces, and this is particularly true for the hemorrhagic form. Mr. Sharkey gives a case where the simple erythematous rash, in no way hemorrhagic, presented itself in the armpits, groins, etc., without at all appearing over the extensor surfaces until later, when the smallpox eruption was plainly apparent.

(B) Hemorrhagic rashes. These are the best known. The most frequent, and at the same time, the most benign variety, consists of a punctiform eruption of petechial spots localized in the groins, the armpits, and at the bend of the elbow. Another variety, and of very grave import, has the appearance of a diffused wine-colored eruption, affecting mostly the same parts as the other. Very frequently the scarlatiniform, or the morbilliform rash is associated with these petechial eruptions.

As regards the prognosis to be deduced from the initial eruptions, Mr. Sharkey thinks that the disease is apt to be of greater gravity when the rash is very extensive or dark colored.

TEMPERATURE IN TRUE VARIOLA.

Dr. Frölich, in *Deutsch. Med. Woch.*, *No.* 48, 1880, gives as the result of his researches on this subject, that during the prodromal stage the course of the temperature presents no characteristic features. On the first day the temperature does not differ from that of other diseases which commence with a chill; until the end of the first week it has the same course as in varioloid, scarlatina, pneumonia, and simple recurrent fever.

It is during the second febrile exacerbation

that the temperature becomes characteristic and renders the diagnosis more certain. But it is only when the course of the temperature is considered as a whole, that it offers any pathognomonic proof, its course during the prodromal stage, or that of invasion or suppuration, offering no special characteristics.

HEMORRHAGIC SMALLPOX.

M. GACHON (*Thése de Paris*, 1880), gives several cases of this form of variola, where the patient succumbed before the appearance of any species of eruption.

The symptoms of invasion were unusually severe, the patients then falling into a state of extreme collapse without exaggerated fever, but with ecchymotic spots disseminated over the body, often preceded by a scarlatiniform rash. The conjunctiva was almost always congested, the roof of the palate covered with bloody sugillations: the urine also containing blood. Death supervened after two or three days.

M. LANDRIEUX relates the following facts concerning five Esquimaux (*Soc. Mèdicale des hôpitaux; Union Med.*, Feb. 12th, 1881): They arrived at Paris January 2d, having lost three of their companions during the voyage, two without eruption and the third on the second day of the variolic eruption. After arriving they were vaccinated, on January 5th, and were admitted to the hospital on the 9th. An infant of 14 months already presented the eruption and died on the third day; the four others also succumbed, two during the period of invasion, and two during the period of eruption; these last suffered from a profuse and continued bronchorrhagia, while their urine consisted almost entirely of blood. The most important anatomical alterations, besides those produced by profuse hemorrhage, were the enormous development of the liver, which weighed from four to six pounds, and was in a state of extreme steatosis; the congestion of the kidneys, with considerable augmentation in volume, and fatty granular degeneration of several tubes, and the fatty deposit in the heart, interstitial and not affecting the muscular fibres.

A case of purpura variolosa, reported by Dr. NIXON (*Dublin Jour. of Med. Science*, Oct. 1877) well demonstrates the difficulty in arriving at a diagnosis between purpura hemorrhagica and hemorrhagic smallpox.

A young man, 28 years of age, had, suddenly, several violent chills, without rachialgia or vomiting. On the fourth day a livid, erythematous eruption appeared on the back of the hands and forearms. The eruption soon became generalized, with more marked coloration than is observed in scarlatina. Simultaneously there appeared on the belly and the inferior limbs petechial spots and ecchymoses, but the eruption did not at all affect the face.

On the fifth day hematemesis and hemorrhage from the bowels occurred; and the patient succumbed the same evening. At the autopsy the blood was found black and of extreme fluidity.

The lungs presented the lesions of diffused sanguineous apoplexy. The liver was the seat of fatty degeneration, resembling the state of the organ in steatosis produced by phosphorus. The kidneys were of the normal condition.

M. RENOU considers this a case of hemorrhagic variola.

INFLUENCE OF SMALLPOX ON PREGNANCY.

M. JOBARD, in a very interesting monograph on this question (*Thèse de Paris*, 1880), admits that miscarriage, exceptional in varioloid, is common in discrete variola (in one case out of two), and is the rule in the confluent and hemorrhagic varieties of the disease. It takes place almost always during the periods of invasion or suppuration.

Abortion is induced: 1st. By the death of the fœtus, resulting from the infection of the mother, or direct variola affecting the product of conception. 2d. From uterine or placental hemorrhage. 3d. From primitive uterine contractions, the least frequent cause.

Abortion may give rise to redoubtable hemorrhage, even in the non-hemorrhagic forms of the disease. Puerperal septicæmia is not to be especially feared.

In cases where miscarriage does not occur the temperature generally remains below 39.5° C.; if it mounts higher there is imminent danger for the fœtus. The author is of opinion that the disease is not invariably communicated to the fœtus in utero, and when contagion does take place it is generally at an advanced period of the malady; in all cases it is proper to vaccinate the child, as if it had not been so nearly exposed to contagion.

LOTHAR MEYER (*Arch. f. path. An. und Phys.*, p. 43, 1880), expresses a somewhat similar opinion; although the smallpox contagium traverses the placental vessels, the receptivity of the fœtus for the disease is much less marked than that of the newly born child. Again, vaccination is less apt to be successful in the newly born infant than when older, but when the virus is sufficiently active and the operation well done, the results are generally satisfactory. When there is no fever, and the inflammatory areola is absent

after vaccination of the newly born, immunity should be considered incomplete.

NERVOUS PHENOMENA DURING AND CONSECUTIVE TO THE ERUPTION.

The dominating idea of the monograph of M. BARTHÉLEMY (*Thèse de Paris*, 1880), is that the variolic virus acts through the intermediary of the infected blood on the nervous centres. This he considers proven by the constant presence of fever, cephalalgia, rachialgia, and the temporary or permanent paralysis which frequently accompanies smallpox, and finally, by the characters of the eruption itself. On the other hand, the toxic nature of the virus is shown by its power of inducing steatosis of the heart, the kidneys, and the liver. The spinal cord and the sympathetic system appear particularly affected, as is proven by the absence of cerebral troubles, or delirium, in the gravest forms of the disease, when there has been no anterior tendency to alcoholism.

M. SAINT-PHILIPPE (*Gaz. Méd. de Bordeaux*, No. 44, 1879) notes, in one case, temporary labio-glosso-laryngeal palsy during the period of eruption, followed during the period of suppuration by paraplegia, which very gradually disappeared, as did also the other symptoms of nervous derangement. M. MANISSOLLE (*Thèse de Paris*, 1880) has found that the nervous phenomena consecutive to variola are sometimes of cerebral origin, characterized by delirium, followed by an alteration in the disposition of the patient, feeble memory, general mental dullness. Frequently speech is affected; in some cases there is aphonia. The author also notes ataxy of the upper and lower limbs, with conservation of sensibility. The pathogenesis of these accidents is obscure.

SMALLPOX AND CEREBRO-SPINAL MENINGITIS.

Dr. GRIMSHAW (Dublin *Jour. of Med. Sci.*, May, 1876) reports a case where the symptoms were those of cerebro-spinal meningitis, where even the diagnosis seemed confirmed by the autopsy. But it was learned, subsequently, that the patient was brought to the hospital from a locality where smallpox was epidemic, and immediately after his death eight patients in the same ward were attacked with the disease. Dr. GRIMSHAW, *apropos* of this case, insists on the sometimes insurmountable difficulty of diagnosis between malignant black smallpox and cerebro-spinal meningitis. Rachialgia exists in both, and is not always cervical in variola and lumbar in spinal meningitis, as has been asserted; vomiting is not a sufficient differential sign, for it may be wanting. Even the anatomical diagnosis is a matter of discussion, for in the malignant form of meningitis no pus is found in the meninges, but hemorrhagic suffusions are often present. It was for this reason that STOKES put all these malignant fevers under the same generic designation, grave purpuric fever.

LUNG TROUBLES IN VARIOLA.

The pulmonary lesions of variola are studied by M. BREYNÆRT (*Thèse de Paris*, 1880); he describes the pustules of the trachea and bronchial tubes, which do not descend to the smaller tubes. He then considers the actual pulmonary alterations, which are, in order of frequency and gravity: 1. Splenization or inflammatory congestion. 2. Spleno-pneumonia. 3. Broncho-pneumonia, with disseminate or confluent points of inflammation. 4. Capillary bronchitis. All of these alterations resemble very much, anatomically and clinically, those of the same kind found in typhoid fever, and have the same causation, which is the adynamic vasomotor paralysis and the blood infection.

M. JOFFROY (*Arch. de Physiol. Norm. et Path.*, 1880) asserts that there exists in smallpox a special form of bronchitis, independent of pustulation in the bronchial tubes; this form of bronchitis is frequent, if not constant, during the course of the disease in the adult, and is often complicated with broncho-pneumonia.

ALBUMINURIA IN VARIOLA.

M. COUILLAUT (*Thèse de Paris*, 1881), founds his deduction on the observation of 116 cases; he found albumen in 42 of these cases, and while it was present in but 5 out of 27 cases of varioloid, in 9 out of 17 cases of confluent smallpox, and 8 out of 14 of the hemorrhagic form, albuminuria was found to exist. Albuminuria of the acute period of the disease is very common, and is observed often in the most benign forms, but is more frequent in grave cases. It lasts generally but two or three days, disappears after the acute disease, and is never the début of renal disease. Albumen is especially apt to appear in the urine at the début of the period of eruption, during the fever of suppuration and when there supervenes any inflammatory complication (pneumonia, pleurisy, orchitis, etc).

The albumen is in small quantity (3 to 5 grains per pint) and is opalescent, hardly ever granular or flaky. The author considers the albuminuria due to temporary superalbuminose, induced by the exaggeration of the organic excreta, under the influence of febrile combustion; it is, however, possible that there exists some temporary alteration of the renal epithelium.

Albuminuria appearing during convalescence is rare; it is symptomatic of acute nephritis, of which it presents all the usual clinical characters (scanty, lactesecent, frothy urine, œdema of the face and limbs, anasarca, visual troubles, sometimes uræmic convulsions).

These cases should not be confounded with simple œdema, without albuminuria, a phenomenon which seems due to vasomotor paralysis, and which is never fatal. Secondary nephritis after variola is of serious prognosis, and may degenerate into Bright's disease.

Correspondence.

Preservation of Cadavers for Anatomical Purposes.

Ed. Med. and Surg. Reporter:—

In your issue of January 21st, in reply to a correspondent who asks for a good embalming injection, you speak of chloride of zinc as a preservative for dead bodies. For the preservation of dead bodies for a period of weeks, or months, as is required in dissecting rooms, there is undoubtedly nothing superior to chloride of zinc, which has the single objection that it decolorizes the tissues. If your correspondent desires a fluid to preserve bodies until burial, such as is required by undertakers, there is nothing better than arsenite of sodium, unless the weather is very warm, when zinc chloride is the best of all. The reason for the preference of arsenical solutions when the body is to be kept but a few days, while being transported, is apparent, when I say that it leaves the tissues of normal color. I have had in my dissecting room arsenical subjects which looked like living men quietly sleeping, so well was the tint of lips and skin preserved. Arsenic will, in cold, winter weather, keep anatomical subjects for a month, or more; but in warm and damp weather it is ineffectual beyond a few days.

The best methods of obtaining the solutions of zinc and arsenic in an economical way may interest some of your readers. I never buy solution of chloride of zinc from a manufacturing chemist, because it is sold at a high figure. It can be made of sufficient purity for anatomical purposes at one-eighth or one tenth the cost of the prepared solution. Commercial muriatic acid can be bought in quantity for four or five cents a pound, and scrap zinc can be got from plumbers and workers in metal for three or four cents a pound. Two pounds of muriatic acid added to sufficient zinc scraps to make a *neutral* solution will give enough chloride of zinc for preserving an ordinary size subject. The strong solution so obtained will measure about one and a half pints, and must be diluted with about four quarts of water, and then strained carefully, that no small fragments may remain to choke the arterioles during injection. The cost, therefore, of home made chloride of zinc solution for one subject will not exceed ten or twelve cents; while that of a similar quantity of the manufactured solution will be about one dollar.

Recently there has been extensively offered for sale in Philadelphia, a disinfectant, which is a solution of zinc chloride, obtained from galvanizing works. This contains a little iron, but, if made neutral by the addition of a few pieces of zinc, or soda, to take up the excess of acid, answers as well as the other zinc chloride, and costs practically the same, viz., ten or fifteen cents per subject. This I have used almost exclusively, in my school, for three years.

Solution of arsenite of sodium is made by putting one pound of arsenious acid (cost varying from five to ten cents, according to quantity purchased), into two quarts of water, and adding slowly, while the mixture is boiling, about a pound of sal soda (costing one or two cents). The soda should be added with care, in small amounts, because it is desirable to add only sufficient to combine with the arsenic; as soon as the insoluble arsenic is dissolved it is evident that the whole has become arsenite of sodium. Any additional soda would only render the solution alkaline, which might be detrimental to the integrity of the coats of the vessels.

So much for the preparation of these preservative fluids, which are cheap, effective, and in themselves odorless. The zinc will keep a subject which is exposed to the air fit for dissection two or three months, when it will mummify and become too hard and dry for service. Arsenic in this climate will not keep the cadaver perfectly for more than a week or two, except in cold winter weather. In summer it is valueless for practical anatomical work.

These two solutions are preferable to glycerine, alcohol, Wickersheimer's fluid, chloral, etc., chiefly because of their cheapness. Wickersheimer's fluid is objectionable, because of its offensive odor and its expensiveness.

When injecting the zinc solution, the first few syringefuls should be quite weak, because a strong solution hardens the small arteries, which are contracted after death, and therefore the preservative fluid does not reach the periphery of the cadaver; hence the skin and subcutaneous cellular tissues are imperfectly preserved. This will be shown in a few days by the puffing up of the integument by subcutaneous gas, and by the separation of the epidermis from the true skin.

It is unfortunate that we possess no injecting material which is cheap and effective, which has the power of destroying the cadaveric poison, which permits muscles and other pink tissues to retain their color, and which, at the same time, leaves the arteries so distensible that the subsequent reddened plaster injection can flow to the remote arterial distribution.

John B. Roberts, M.D.

Phila., Jan. 28th, 1882.

Albuminuria in Pregnancy.

Ed. Med. and Surg. Reporter:—

In your issue of January 7th, I notice an article copied from the *Canadian Journal of Medical Science*, on the "Indications for the Use of Morphine in Puerperal Eclampsia," by Dr. L.

McFarlane. The writer has evidently had to do with a few cases of convulsions in lying-in women, resulting from nervous prostration, accompanied with anæmia and hysteria, where opium and free stimulation were indicated, and straightway rushes into print with the surprising declaration that this is the true pathology, not alone of these few cases which he has so treated, but of *all* cases of puerperal convulsions. It is the old story, "generalization from insufficient data." The "albuminuria" theory on this subject, promulgated some years ago over the water, carried away whole hecatombs of victims, and that its utter falsity and stupidity were not demonstrated sooner is a standing reproach to the medical profession. Again it appears, in another form, equally objectionable and equally stupid. It is not surprising, in this age of crude and undigested thought in all departments of human learning, that some one should write such a piece as this, but that it should be selected and dignified by a place in your excellent journal is incomprehensible to me.

The mischievous tendency of such literature is so palpable to the thoughtful medical man as to need no demonstration. When will we learn, and not forget the fact, that the producing cause of convulsions in pregnant or lying in women is not a constant quantity? A constant cause implies a constant remedy, and the logical sequence is a "wild goose chase" after that will o'-the-wisp called a specific. Admit a constant cause, and a constant pathology, and the doctrine of specifics is made out, and a physician is no longer needed. Packages of medicine neatly labeled from the shelves of the druggist will answer every purpose, and our "occupation is gone." Most unfortunately there are, and always will be, insurmountable obstacles in the way of this most happy consummation.

Diversity of personal qualities in the patients would of themselves preclude the idea of treating all cases alike, even if the pathology were always the same. Our nomenclature for different forms of disease is as faulty as it well can be. Take this one in question, "puerperal convulsion." It describes a symptom, but gives not the slightest hint at the cause, or the real diseased condition. As well say "puerperal headache," "backache," "stomachache." Neither of the expressions is an intelligent answer to the all important question: What is the matter with the patient?

The truth is, there are at least three widely different pathological conditions which produce convulsions in lying in and pregnant women. 1st. A true cerebral hyperæmia, very closely allied to that which is present in apoplexy, resulting, if not promptly relieved, in effusion, coma, and death. 2d. Anæmia, added to a nervous and excitable organization, by some very properly called the "hysterical variety." 3d. Those who have uræmia from true inflammation, or granular degeneration of the kidney. This last variety is admitted to exist, but it is quite probable that careful investigation would show that the puerperal state has little or nothing to do with their production.

Albuminous urine in pregnant women means nothing at all, practically, of itself. More than one-half of them have it, after the fifth month, and nothing serious ever comes of it.

It is certainly true, at least in this part of the country, that cerebral congestion is the all important factor in the production of this frightful malady. Dr. McFarlane would have us give opium in these cases. Who would be stupid enough to follow his directions? The necessity is so strong and urgent, and the indications so plain, for the use of the lancet, that I am at a loss for a word to express it. Certainly in my own pretty wide experience with such cases, I have never seen any therapeutic agent, under any circumstances, produce more happy results. It must be used with an "eye single" to the effect upon the circulation, without regard to the quantity of blood taken, to be followed, as soon as the patient can swallow, by a mercurial purgative, or a drastic cathartic of some description. The only patient I have seen die of this terrible disease was one of the victims of the "albuminuria" theory. It is not a pleasant recollection. The plainest possible indications for depletion were neglected and thrown aside for an *abstraction.*

S. M. Hamilton, M.D.

Monmouth, Ill., Jan. 28th, 1882.

On Typho-Malarial Fever, so Called.

Ed. Med. and Surg. Reporter:—

In a communication in the Reporter of Jan. 21st, 1882, headed "Some Points in Malarial Fever," by J. W. Hickman, M.D., Delta, Pa., he says he remarked to an intelligent physician that malarial fevers were this year of unusually intense type; and the reply he received was, that they no doubt had associated with them a typhoid element. As I made such a remark to Dr. Hickman, and as I believe there is a disease which we cannot call by any other name, I have concluded to give some reasons for my belief. I also remarked that Dr. Woodward had written a small work, and described the disease among the first. His work I never saw, nor his retraction of it; but I have talked with Dr. Woodward on the subject, as he and I were attached to the same division during the Peninsular campaign, I having charge of Kearney's Division Hospital, where I had ample opportunities to study the malarial fevers of that region. We did not have as well marked cases of typho-malarial fever there, however, as we have here in our malarial districts. Prof. Dickson, however, held the same view before Dr. Woodward wrote his work on the chief complicating diseases of the United States armies. And we also have such an able teacher and author as Prof. Flint *scattering such opinions among the people.* In Flint's practice, page 839, he says, "Typho-malarial fever is caused by the combined action of malaria and the special cause of typhoid fever. He also says, practitioners in malarious situations have been accustomed to say that remittent became converted into typhoid fever. This mode of expression is not accurate. There is not a metamorphosis of the one disease into the other, but a combination of both diseases, the phenomena of the one or the other disease predominating in different cases."

I have met with many cases this season which

commenced with a chill every afternoon, followed by a temperature of 104 and 105° in the evening. The next morning it would be normal. And with all the anti-malarial remedies used the chills would continue for ten days or more, when they would gradually cease, and the fever become continuous, with all the symptoms of typhoid fever, even the rose colored spots, bronchial trouble, tympanites and diarrhœa. Some cases would start as remittents, and end with all the typhoid symptoms. To call such cases pernicious intermittents or remittents is nonsense. When a case of intermittent or remittent fever does not yield to full doses of quinia, repeated for three or four days, you generally have the typhoid combination. I confess I never give the doses recommended by Dr. Hickman, 20 to 30 grains, three to four times daily; his maximum dose would be 30 grains, four times daily, or an ounce in four days. Such doses I consider uncalled for and dangerous. Nor would I, as a rule, give his minimum dose, 20 grains, three times daily, for I have seen unpleasant symptoms produced with less doses. I know several medical men of over a quarter of a century experience in malarial districts, and who are neighboring practitioners of mine, who treat and recognize typho-malarial fever, and they are neither knaves nor ignoramuses. W. F. Smith, M.D.

Airville, Pa.

News and Miscellany.

Pharmaceutical Preparations.

LIQUID PANCREOPEPSINE.

The value of pancreatin as a digestant has been amply indicated by Dr. Dobell. Messrs. Warner & Co. have combined it with pepsin and lactic and muriatic acids in the preparation named above, and thus furnish the several aids to digestion required in the stomach and upper bowel. Their compound solution is of a delicate straw color, clear, agreeable to the palate, and very well adapted for atonic conditions of the upper digestive tract.

HERCULES MALT WINE.

This is a new and palatable form of malt extract with the addition of a small but fixed quantity of alcohol, and prepared especially for dietetic and medicinal use. We can commend it as entirely pure, and well adapted for use where a light tonic beverage is indicated. It is manufactured at the Prospect Brewery, corner of Eleventh and Oxford streets, Philadelphia, Pa.

Emma Abbott and Vaccination.

A daily paper has the following about Emma Abbott, the songstress. Some weeks ago she was singing in Chicago, and becoming alarmed at the prevalence of smallpox, determined to be vaccinated. But where? She thought it would be outrageous to disfigure her arm with a scab and scar. Finally, the left leg, above the knee, was decided upon. She was cautioned to exercise the limb as little as possible, which advice, of course, she neglected. Finally, one evening, in St. Louis, she appeared in the mad scene from Lucia, and was so enthusiastically received that all caution was thrown aside, and she exerted herself to the utmost. *Result.*—She was laid up with a badly inflamed thigh and had two doctors attending her. *Moral.*—Do not be so foolishly vain as to be vaccinated where judgment says the operation should not be performed. The arm is decidedly the best place, and it should always be done there.

Longevity Among the Irish.

It is a noteworthy fact that remarkable instances of longevity are to be found among the Irish; and it is particularly striking when we notice that these cases occur mostly among the lower classes, who are submitted to many hardships. It would seem to be a telling argument against excessive luxury, and in favor of some hardships and rough usage as a factor in the promotion of longevity. From an exchange, we note that during the quarter ending the 30th of September last, the deaths of eleven person 100 years of age, or upward, were reported. One man, who died at the age of 101, was able to work on his farm up to within a week of his death. A woman, who died at the age of 100, was able to go about the day before her death, her senses being perfect; while another woman, who died at 103 years of age, had lived for eighty years in a cabin on the summit of the highest of the Burrew mountains.

The Progress of Medicine.

The *Lancet* notices a recent article in the *Westminster Review*, commenting on the progress of medicine in recent years. Among other prominent points, it says: "Medicine though not strictly a science itself, yet rests upon several sciences, and is truly scientific in its processes and results. The writer clearly demonstrated that the claim of medicine to be considered truly scientific is not unfounded, and that its progress in recent times is but the first fruits of a harvest that promises to be gathered in not slowly, and the value of which to individuals and to the race will be incalculable.

Sanitary Convention.

A sanitary convention will be held at Ann Arbor, Michigan, under the auspices of the State Board of Health, on February 28th and March 1st, 1882. There will also, at the same time, be held an exhibition of sanitary apparatus. Further information may be obtained by addressing the secretary, V. C. Vaughan, M.D., Ann Arbor, Michigan.

Pennsylvania State Medical Society.

All persons who have papers which they desire to read before the Pennsylvania State Medical Society, at its next meeting, are requested to forward the title of the same, with their address, to Dr. William Varian, Titusville, Penna.

How to Give a Savage Dyspepsia.

An English physician with whom Sydney Smith was always in a controversial state, accepted a professional call to Australia in its early savage days. When taking leave of him the wit said, "Good bye, Doctor; you have never failed to disagree with me, and I believe you will disagree with the savage who eats you."

Items.

—A family living near Corinth, Kentucky, were recently poisoned (five of them it is thought fatally), by eating corn bread supposed to contain arsenic.

—It is stated by Dr. Billings (U. S. A.) that 100,000 people die annually in the United States, from preventable diseases and avoidable accidents.

—Mr. Erasmus Wilson, President of the Royal College of Surgeons, England, has received the honor of knighthood, in consideration of his numerous gifts to charities, etc.

—False ipecacuanha is distinguishable from the pure drug by being more branched, by its dirty white color, and by the absence of the annular rings present in the *genuine* article.

—A young lady, who for some time complained of pain in her shoulder, as though a pin was sticking her, was recently operated upon, when a needle found imbedded in the flesh was removed.

—It is reported from Erie, Pennsylvania, that thirteen persons in a boarding house were poisoned by gas from a coal stove not properly closed. When found, they were insensible, but recovered.

—Our venerable friend, Mrs Partington, says that "Ike has an irrigating disease: Charlotte russe broke out all over him, and if he hadn't worn the Injun beads as an omelette it would doubtless have calumniated fatally."

—Statistics show that Paterson, N. J., in proportion to its size, has more one-eyed men than any other city in the United States, except Pittsburgh. Nine tenths of those thus afflicted are workers in iron and steel, and have been struck in the eye with the metal chippings.

—One day recently, Dr. Augustus F. Müller, of Germantown (a suburb of Philadelphia), while driving along the turnpike, was startled by the appearance of a masked man, who grasped the horse's bridle and leveling a pistol at the doctor's head, demanded that he should "shell out." The doctor gave his pocketbook, containing ten dollars, to the highwayman, who thanked him, and expressing regrets for his unceremonious way of asking a loan, disappeared. The matter was subsequently reported to the police.

—A prize, of the value of £100, offered by the Equitable Life Assurance Society of the United States, for the best essay on "Life Assurance," has been awarded to T. M. Dolan, F.R.C.S. Edin., of Halifax, Yorks.

Does it not seem a pity that with all the talent and energy to be found in this country, a foreigner took this American prize away from us, or does it argue that we set so high a value on our talent as not to consider such a trifling prize worth striving for?

—A man accused of fraud assumed hydrophobia, and was with difficulty conveyed to a hospital on a stretcher. He subsequently admitted that he had been malingering. He was subjected to galvanic shocks, but stood them so well that, as a final test, one of the medical operators said, "Take him away; we'll try the 'big' battery to-morrow." This hint of what was yet to come, it is said, proved a little too much for the prisoner's endurance, and he ultimately confessed that he had been simulating madness.

OBITUARY NOTICES.

SIR ROBERT CHRISTISON, M.D., F.R.S.

This distinguished physician died recently, in London. He was born July 18th, 1797. In 1819 he graduated in medicine at the University of Edinburgh. He then went to Paris and studied toxicology under Orfila. Returning to Edinburgh in 1822 he began the practice of medicine, and was soon afterwards appointed Professor of Medical Jurisprudence in the University. Ten years later he was promoted to the Chair of Materia Medica. He was a witness as an expert in poisons in the celebrated Palmer trial in London, in 1856. In 1866 he received the degree of D.C.L. from Oxford University, and was created a Baronet in the year 1871. He received the degree of LL.D. from his own university in 1872. Sir Robert twice held the position of President of the Royal College of Physicians, Edinburgh, and at the time of his death was Ordinary Physician to the Queen, for Scotland. He resigned the Chair of Materia Medica in April, 1877. He contributed numerous articles to medical journals in both London and Edinburgh, and was the author of several books. One of his works, entitled *A Treatise on Poisons*, is recognized as the standard work on the subject.

MARRIAGES.

HARRIS—BAKER.—In Marlton, N. J., Jan. 15th, by the Rev. Isaac Cook, William H. Harris, M.D., and Mrs. Elizabeth C. Baker, all of Evesham township, Burlington county, N. J.

JOHNSON—STRUBLE.—On January 18th, by Rev. R. B. Foresman, Dr. Levi W. Johnson, of Morristown, N. J., and Lizzie Struble, of Hunt's Mills, N. J.

McCLENATHAN—HANNA.—On Thursday, January 12th, at the home of the bride, near Prosperity, Pa., by Rev. J. H. Sherrard J. C. McClenathan, M.D., of Connellsville, Pa., and Miss Flora M., daughter of Thomas Hanna, Esq.

DEATHS.

CONRAD.—In this city, on the 25th instant, Dr. Isaac H. Conrad, in his 68th year.

GRISWOLD.—In New York, on Tuesday morning, January 24th, Dr. Samuel L. Griswold, aged 73 years.

HANLY.—In this city, on January 27th, Dr. J. A. C. Hanly.

REID.—In New York, on Sunday morning, January 22d, Kenneth Reid, M.D.

SHALER.—In Cincinnati, Ohio, on Tuesday, January 17th, N. B. Shaler, M.D.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1303.] PHILADELPHIA, FEBRUARY 18, 1882. [Vol. XLVI.—No. 7.

Original Department.

Lecture.

GONORRHŒA IN THE MALE; ITS NATURE, CAUSES, AND TREATMENT.

Delivered in the Medico-Chirurgical College of Philadelphia,

BY CHARLES I. MITCHELL, PH.D., M.D.,

Professor of Chemistry, Sanitary Science and Venereal Diseases.

Gentlemen:—The subject to which I propose to call your attention this morning is gonorrhœa. Gonorrhœa is a local disease, confined to the urethra in the male, and the vagina and urethra in the female. We more rarely have it, by mediate contagion, affecting the mucous membrane of the eye and lids, the conjunctiva, where its action, producing gonorrhœal ophthalmia, is most disastrous.

Gonorrhœa is caused by the direct contact of the part with an infecting material. This material may be the purulent discharge of another gonorrhœa, the acrid uterine and vaginal discharge of an active uterine catarrh, or the partially decomposed and irritating flow of closing menstruation. Still more rarely it may be produced by the deposition of virulent purulent matter from a non-venereal source, such as a purulent ophthalmia, by the use of chemical irritants, or by an abnormal and irritating condition of the urine.

There are at the present day two theories regarding the origin of gonorrhœa. One claims that true or specific urethritis can only be produced by a special venereal poison, the gonorrhœal pus from another person suffering with the same disease. The other argues that there is no special venereal poison, and that the disease can be produced by any irritating agent. At the present time the weight of evidence seems to be in favor of the non-specific theory. Experiments have shown that a most violent inflammation can be produced in a healthy urethra by the deposition of purulent matter from a non-venereal source, and that this inflammation is in no respect yet known different from that produced by direct venereal contagion. Prof. Otis, of New York, has introduced into the urethra of a healthy individual the pus taken from the eye of a child suffering from acute ophthalmia, and in less than a week a virulent gonorrhœa was produced. A case of my own will also illustrate the fact that a slight irritating discharge from the uterus can cause a violent gonorrhœa. A young man, well known to me, came under my care for an attack of clap. The disease was in its acute stage, attended with all the symptoms of great œdema, chordee, painful micturition, purulent discharge, etc., etc. The attack proved to be one of the most virulent I had ever seen. I caused him to bring to my office the person from whom he had derived his trouble, but who I had some reason to believe was not likely to have a specific gonorrhœa. I made a most careful examination of uterus, vagina and urethra, with the result of finding only a slight congestion of the uterine neck, and no specific or other form of inflammation. She informed me, moreover, that intercourse had taken place before menstruation had entirely ceased. It so happened that a friend of my patient also visited this young lady, a night or two subsequent to my patient's encounter, and suffered no bad results whatever. I had every reason to believe that the facts had not been misrepresented, and that this was a case of gonor-

rhœa not caused by specific poison. I am treating a female patient for active uterine endo-cervicitis, and also have under my care her husband, who is suffering from a gonorrhœa contracted from this source. Another argument against the specific nature of gonorrhœa is found in the fact that in public asylums, or institutions, where a number of young girls live together, an attack of catarrhal vulvitis originating in one person may be communicated from one to another, until nearly all the members of the community become infected, and present a series of symptoms not to be distinguished from a specific disease. Ricord says, "women *frequently* give gonorrhœa without having it; he should have said *most frequently*. For one case of gonorrhœa resulting from contagion, there are at least three in which contagion, strictly speaking, plays no part. The opinion of many of our most prominent gynæcologists is in accord with these conclusions. In view of these facts you must be very careful in passing judgment upon the virtue of a woman, especially with such odds in favor of her innocence.

Gonorrhœa can also be produced by ignorant "self treatment." A man exposes himself to a suspicious connection; fearing that he may become infected, he tries to prevent the disease from appearing, and accordingly goes to the drug store and requests the clerk to put him up a twenty-five cent bottle of injection, "something strong, that will take it out of his system." Or some kind friend gives him a prescription which is very good, as he was cured by its use. The kind friend may have suffered from a gleet, or chronic urethritis, and when our transgressor uses on a normal or but slightly inflamed urethra the injection intended for a chronic case, you need not be surprised to find him suffering from the disease he so ardently desired to prevent. I have been called upon a number of times to cure an active clap originating in this manner, from nothing but a little mucous discharge from the urethra, which, if left to itself, would have disappeared in a few days.

Again, in males who have a stricture of the urethra, or a chronic gleet with granulation, any indiscretion, such as a prolonged "spree," excessive intercourse, or intercourse with a woman suffering from a slight leucorrhœa, may be sufficient to inflame these already weakened parts, and light up on the old site an active attack of gonorrhœa. I cannot refrain here from giving you Ricord's celebrated receipt for catching a clap. "Select some woman of a pale, lymphatic temperament—a blonde is better than a brunette—and the more 'whites' she has the better. Take her out to dine; order oysters first, and don't forget asparagus afterward. Drink often and freely, white wines, champagne, coffee, liqueurs, they are all good. After dinner dance a while, and have your friend dance with you. Get well heated during the evening, and quench your thirst without stint, with beer. At night play your part valiantly; two or three times are not too much; but more would be better. The next morning do not forget to take a prolonged hot bath; moreover, do not omit to take an injection. This programme having been conscientiously followed out, if you don't have a clap some good deity must have saved you."

Fournier's statistics are also of much interest in this connection. In making an investigation of the class of women from whom gonorrhœa is derived, he found them to be divided as follows:—

Public prostitutes,	12
Clandestine prostitutes,	44
Kept women; actresses,	138
Shop girls,	126
Domestics,	41
Married women	26
	387

I have found a large proportion of cases in my own practice to be derived from illicit intercourse with married women. I have found also, upon inquiring into the history of these cases, that nearly all of the married women who caused the disease were suffering from some form of uterine disease. This is additional proof, to my mind, of the non-specific nature of gonorrhœa for had it been specific the husband would not have escaped. As it was, being "acclimated," so to speak, he did not experience ill effects. I will first consider the disorder in the male.

The pathological changes which take place in an acute attack of gonorrhœa consist chiefly of a hyperæmia of the mucous membrane, with swelling, pain, and increased cell proliferation. The epithelial cells thus thrown off are imperfectly developed, and consequently readily undergo fatty degeneration and become puriform. The disease travels backward from the meatus, and according to Desormeaux, has by the eighth day involved the anterior half of the urethra, the mucous membrane being reddened, roughened, and devoid of polish, with bare spots like those seen in balanitis when the epithelium has exfoliated. These changes remain the same in the advanced stage, only the lesions involve the deeper portions of the canal, particularly the sinus of the bulb, the membranous and even the prostatic urethra. With the subsidence of the

acute symptoms, the inflammation disappears from the greater portion of the channel, and limits itself to special points, probably the most frequent being those just spoken of. Here granular or fungous elevations form, of a deep red color, and the mucous membrane becomes thickened, and often tough and horny. These patches prolong the gonorrhœa into a gleet, and lead inevitably to stricture.

The prognosis of gonorrhœa is generally good, the disease being self limited, and in ordinary cases without treatment not lasting over six weeks.

The period of incubation of gonorrhœa is from one to six days. The more virulent the disease the sooner the symptoms appear, and the severity of an attack may often be predicted by the duration of the incubation.

The first symptom of gonorrhœa is a slight tickling or pricking sensation at the meatus during micturition. On examination, this is found to be a little more florid than usual, and slightly pouting, and on gentle pressure, one or two drops of a clear, viscid liquid can be made to appear. This is the first stage. It lasts from twelve hours to two or three days, the discharge gradually increasing in quantity, becoming milky in color, and showing under the microscope the presence of pus corpuscles. At the same time the pain in urination becomes more noticeable. The second or acute stage now commences. The discharge becomes quite profuse, thick in consistence, and yellowish, and even slightly greenish, from the presence of blood corpuscles. It also possesses a slight, peculiar, disagreeable odor. The urethra itself is slightly prominent along the under surface of the penis, and is sensitive to pressure. The glans penis is swollen and congested, and the prepuce is often so enlarged and œdematous as to make the head of the penis twice its natural size, and to render it impossible to uncover the glans. The whole penis is in a state of partial erection, much congested, and painfully sensitive. Micturition is now extremely painful. The pain is cutting, burning, and scalding, and is felt along the whole ante-scrotal portion of the urethra, often extending also to the deeper parts. The urine is ejected spasmodically in small jets, the stream being forked and irregular. At this stage of the disease another complication is likely to occur. At night, after the patient has retired to bed, he is troubled with peculiar painful erections; these symptoms have received the name of *chordee*. The genital organs, in consequence of the inflammatory nature of the disease, are in a highly sensitive condition, and are readily excited by voluptuous dreams, a full bladder, or the contact of the bed clothes. He will awake, therefore, with an excessive erection, the penis being bent in the shape of an arch, with the concavity downward. This peculiar condition is caused by the extension of the inflammation from the urethra to the delicate tissues of the corpus spongiosum. Plastic lymph is poured out around the canal, infiltrating the tissues, glueing them together, and rendering them less capable of extension than those of the corpora cavernosa. Hence, the urethra is too short for the latter, now much enlarged by erection, and acordingly the penis is bent downward, the inelastic corpus spongiosum acting like the string of a bow. The suffering attending chordee is very marked.

Hemorrhage from the urethra may occur at this period. It may be produced by a simple erection, but more frequently follows some condition of prolonged excitement, such as a debauch, or sexual excitement. The practice of "breaking the chordee," as it is termed, will frequently produce copious, and even dangerous bleeding. In this, the patient bends the curved penis violently, so as to straighten it, with the result of rupturing more or less of the congested blood vessels. It is a dangerous practice.

Other complications, such as acute cystitis, prostatitis, orchitis, or cowperitis, caused by the inflammation extending to the bladder, prostate, testicles, or Cowper's glands, will be described when I come to speak of the affections of those organs.

The stage of gonorrhœa which I have just described is variable in its duration. As a general rule it lasts from one to three weeks, being much influenced by the habits and constitution of the individual.

The last or subacute stage of gonorrhæa is characterized by the disappearance of all acute symptoms, and a gradual return to a normal state. The discharge becomes less and less purulent and scantier in quantity; the pain on urination disappears, the swelling subsides, and the urine is passed at the usual periods. The duration of this stage is much influenced by treatment; it may be soon cut short, or left to itself, may linger for months.

Gonorrhœa acts differently upon individuals; in some the disease may never be more than subacute, or chronic, in others the acute symptoms may be very severe, and be attended with great constitutional disturbance. Professor Agnew mentions a very interesting case, where, in three days from the commencement of the attack, the constitutional symptoms ran so high as to

finally develop blood poisoning, followed by death.

To be continued.

COMMUNICATIONS.

SHOULD BLOOD LETTING BE MORE FREQUENTLY EMPLOYED?

BY THOMAS H. MANLEY, M.D.,
Of New York City.

If one were to solve this question by leaning on modern authors, in either therapeutics or clinical medicine, he should answer emphatically, No! If again asked to give some of the reasons why blood letting, at the present, is ignored, and by many condemned, he would find it more difficult to answer.

Let him first proceed to answer the second question; and to do so satisfactorily, he must first show that disease, in its course and termination, is different to what it has been in ages past, requiring other milder remedies to abort, subdue, or moderate it. Failing to do this, he must show, as a matter of *fact*, that since the lancet and the leech have been laid aside, the death rate has been diminished, and under the administration of drugs *alone*, maladies have taken a milder course; he must prove that especially inflammatory disturbances of the economy have been less mortal than formerly, and that their sequelæ have been less formidable and more curable when met with narcotics, ice-water baths, and the so-called antipyretics, as salicylic acid, quinia, etc. But when statistics, as well as everyday experience, are consulted, it will be found that proof of the affirmative cannot be sustained. The timid and doubtful beginner, to justify his views, says Professor So-and-So doesn't bleed; during my three years' course at an American medical school, I never saw a person, young or old, bled by my instructor, even by the application of the scarificator or leech; a lecture was never given on the subject by the surgeon or teacher of practical medicine; in fact, I supposed the art so dead and obsolete, that a knowledge of it was non-essential.

In such a state of blissful ignorance is our modern medical man when he offers himself to the public; and he will soon be called upon to preserve health, prolong life, and avert death. A noble representative of the medical profession! He may be able to recite Virgil, read Homer, or quote Cicero, but when the time comes in his patient's case that the lancet should be used, or the leech applied, he is at sea. He neither knows *how* or *when* to bleed.

No single agent is known in medicine productive of so much good, when judicious care is exercised, as venesection, or the local abstraction of blood by the leech, scarification, or puncture. An explanation cannot always be rendered as to how it *acts*, either by appealing to physiology or pathology. It is frequently employed empirically, as in cases of hæmoptysis, and other instances.

But pathology—though through it we may sometimes recognize mortal maladies, has it cast a single gleam of light on the treatment of diseases, except those managed by the surgeon? Watson says in his lectures, that "Lænnec's discovery of auscultation and percussion rather retarded and obscured the treatment of those pulmonary affections which it assisted the world to recognize." Pathologists to-day may have a war of words about the identity of diphtheria and croup; the varieties of pneumonia; tubercles as the only exciting cause of tuberculosis, etc. But withal, have they, in any material way, contributed anything toward an improvement in the treatment of those affections?

The same drugs and applications for all pulmonary affections, the inevitable poultice, plenty of opium to force sleep, aconite, veratrum viride, and digitalis. The fact of a man's lung being loaded with an undue quantity of stagnant blood—as it were—pressing up and down against an inflamed pleura, is of no consequence. That the heart is laboring under a terrible strain, to force as much blood through one lung as should normally go through two, is regarded in the same manner. Plenty of digitalis in order to rouse the flagging cardiac muscle. Meet delirium with chloroform, and the removal of the cause that gave it birth is of no moment; *the man must sleep.*

In the primary stages of brain, pulmonary, rheumatic, and abdominal inflammations, blood letting is the sheet anchor. Keep back your poisons and give nature a chance. In cirrhosis of the liver, the overcharged portal system finds a vent through the stomach.

"Sustain the patient," is the cry; "most inflammatory diseases are *self limited.*" The most fallacious and dangerous doctrine ever enunciated. An admission that the medical art is powerless, is a monstrous nuisance.

By sustaining a man in high fever, is generally understood, to cram him with strong solutions of albuminous substances, as milk, and meats; to this is added free stimulation with alcoholic drinks. When every gland in the body is in a state of intense congestion—no single one doing its full duty; when the power of assimilating

food is crippled or destroyed, and the patient lying prostrate, making no expenditure of strength, he is recommended strong food, such as he might, perhaps, loathe in health; and to make matters worse, stimulants are given. When nature, after bravely struggling against the ravages of the fever, threatens to terminate existence, instead of unloading the vessels of a portion of their blood, new stimulants are poured into the man's stomach. The patient sinking is cruelly crammed with so called *nourishment*, which does not nourish, however. Many of those who advise the plan of stuffing, if I may be allowed to use the term, are also believers in the self-limitation of disease. No doubt they sometimes limit *life* if they cannot the disease. They can occupy four or five lectures on tissue changes in the kidney, and alterations in the quality and quantity of the urine. But can they, if they try, show us how, by this demonstration of the dead man's kidney, it will in any way enlighten us as to the cure of one afflicted with a similarly diseased organ? Our province is to relieve distress and effect a cure. In attempting to prove how this is always accomplished, one only plunges further into those mysterious labyrynths of nature where, for ages, the earnest efforts of man have failed to penetrate. Hence, I hold that this extensive research in studies of pathology has been at the expense of therapeutics, and consequently at a large sacrifice of human life.

No one can fail to see that many graduates in medicine, in America, are totally unfit to treat a case of violent fever. They may, perhaps, be able to give the diameters and varieties of blood globules, and give the theories of the multiplication and birth of bacteria, but to perform the functions expected of them at the bedside, they are incompetent.

I make this digression, in answer to the question, "how does venesection beneficially act, when judiciously employed?"

When it is decided to bleed, do it early, and continue it till an impression is made on the system. Lay aside your stimulants and narcotics, as well as rich nourishment, till the fever is aborted, or if it exists, till it is abated. Then, when the patient craves it, give demulcents and acidulated drinks, till the temperature of health is restored. Now for nourishment.

The attending physician never saw a man bled; he might drive the lancet into the brachial artery; and then it is not *fashionable* to bleed now-a-days.

Phlebotomy, to be effectual, must be performed *at the onset* of congestion or inflammation, with an unsparing hand, till its operation is perceptible. Of course it is understood that careful judgment must be exercised in selecting cases for which this treatment is appropriate. Why nature often *admonishes* us how indispensable i is. Epistaxis is often the precursor of fever, and when fever exists, at its crisis, and men of long experience and good judgment claim that phthisis is most curable when the lungs bleed moderately. It is maintained that intense congestion and violent fever, in their incipiency, can be better checked and controlled by free depletion with the lancet than with any other known method. It is denied that death is due to prostration, as that term is commonly understood, from want of nourishment, or prolonged exertion; a most illogical and dangerous assertion. More abstraction of blood in febrile diseases, congestion of the brain, lungs, or liver especially; we will then hear less of apoplexies and heart disease. Avoid giving nourishment without having distinctly in view what it is given for. Give medicine, then, with a sparing hand, no matter how much an especial drug is vaunted; bestow more care on therapeutics, the treatment of the sick, and less on morbid anatomy and pathology. It is well known that man can live on one kidney and one lung. It is also a fact, about which there is no dispute, that there is normally an excess in quantity of blood actually needed by the economy, and that primarily the blood is the seat of all diseases.

Cups, dry, or wet, are most conveniently applied on the chest and abdomen. On the chest, their effect is most noticeable when pain exists, as in pleurisy. Sometimes, when "the spool of the breast is down"—coxalgia—many silly people declare the *bone* in its place after the application of a few cups. In abdominal inflammations generally, we must substitute the leech, on account of its extreme sensibility. Cups are much used in spinal congestion and inflammation and occasionally in sciatica.

In closing my remarks on this very important subject, I would repeat, that my aim has been to call attention to the necessity of reviving blood letting; that it has lately been too generally ignored; and to the ignorance of the manner of performing it; and that the timidity of the attendant is due to unpardonable negligence and carelessness of medical teachers.

And it is only reasonable that the most ready measure of reducing its quantity, and restoring it to its natural state, is that which conduces to reëstablish health. Give the glands and emunc-

tories a chance, by rest, to complete the work of restitution. No more, then, of self limitation of disease. The doctrine is pernicious, and leads to the conclusion that relief cannot be had by artificial interference.

Hospital Reports.

PENNSYLVANIA HOSPITAL.

SERVICE OF DR. JAMES H. HUTCHINSON.

Reported by Geo. F. Souwers, M.D.

Mitral Disease following Rheumatism.

Gentlemen:—I propose offering to you for consideration, this morning, two different and yet similar cases. I say that I am to offer two cases, but in reality, I shall be able only to show you the pathological specimens from one of the patients, she having died within a few days of the time of her admission to the wards, and in the interim between two clinic days. In both instances we have had varieties of rheumatism to deal with; in one a free, frank expression of disease, and which, unfortunately, proved too much for the vitality of the patient; the other, a more or less hidden manifestation of the dyscrasia, and one in which, unless you were familiar with such cases, you would be liable to overlook the exciting cause. The clinical history of L. L., the specimens from whose body I show you, was as follows: She was a German; single; and aged sixteen years. She was fairly healthy until she was six years of age (or about ten years ago), at which time she suffered an attack of inflammatory rheumatism; after recovering from this attack, which, by the way, was sustained before emigrating to America, she enjoyed good health until three years ago, when, immediately after her arrival in this country, she had another attack of acute rheumatism, which lasted five weeks; at the time of this last seizure she suffered severely from intense pain in the chest. Since this time she has never been able to work; there has always been present more or less pain in the chest; dyspnœa, which was especially marked upon making any, even the least, exertion. Last July her abdomen and legs commenced to swell, but this condition promptly disappeared under treatment. About one month ago the legs and abdomen again began to swell, and five days ago (I read from the notes taken on her admission, November 2, 1881), this dropsical condition had reached such a degree that blebs had formed on the skin; these ruptured and left superficial ulcerating surfaces. Upon admission to the hospital the patient was found to be cyanosed, the pulse marking 120 beats to the minute, and very weak in character, the respirations, which were short, being 46 to the minute. Legs very œdematous, the serum oozing out through the skin, superficial ulcers being situated all over the inner side of the thighs and legs. Abdomen much distended, percussion dull over the lower part of the abdomen, especially when the patient is placed in the sitting posture, fluctuation being distinctly felt. The hands likewise are œdematous. The apex beat of the heart is more distinctly felt in the sixth interspace, 2½ inches outside of the left nipple, the whole side of the chest heaving with the impulse of the heart; the area of præcordial dullness is very much increased, there being also a marked systolic murmur, which is somewhat musical in character, this sound being heard most distinctly over the apex of the heart; the vessels of the neck, which are very distinct, can be seen to pulsate markedly. The examination of the lungs gives negative results; urine is acid, with a specific gravity of 1.028, albumen being present in very large amount. We will now leave the notes made by the resident physician for a few minutes and study the case and specimens on their own merits. We have here the history of a girl whose father and mother died of typhoid fever, which is not a trouble capable of being inherited, who during their lives were healthy, and none of whose family, with the exception of the child whose case is under consideration, have ever suffered any sickness of any kind. We have here the story of a patient who suffered repeated attacks of inflammatory rheumatism, but between which attacks she did not complain of ever having suffered any particular inconvenience. I think, however, that, unconsciously, she was suffering under a diseased condition which of itself was not sufficient to greatly inconvenience the economy; after a time, however, the heart lesions, which were the consequences of the first attack of rheumatism, made themselves manifest, and to such a degree that when I first saw her she was cyanosed, her expression of countenance being anxious and disturbed, and she was unable to lie down, owing to the great difficulty experienced in obtaining her breath when in the recumbent position; the conjunctivæ were jaundiced, the nails blue, and the whole surface of the body had assumed a darker hue than in health. In health the heart's impulse is detected in the fifth interspace, below and within the nipple, but here the whole of the left side of the chest moved with every motion of the heart, the most distinct impulse being, however, in the sixth interspace and 2½ inches to the left of the nipple, showing that the apex of the heart was about 3 inches to the left of its usual position; to the right of the sternum, and at and above the line of the third rib, an impulse could also readily be felt. The percussion dullness extended very considerably to the right of the sternum, and so high up above and below the usual point that I thought we might have present an effusion into the percardium, but the very great distinctness of the sound of the heart and the impulse in this region, showed that this was not the case. From the wide extent of percussion dullness, coupled with the fact of the feebleness of the impulse, I concluded that we had to deal with a case in which, while there was hypertrophy present, dilatation of the heart was the predominating condition, and that the heart muscle had ceased to be a compensating force in overcoming the mechanical defects in the valves. On auscultation a loud systolic murmur could be heard at the apex of the heart, this sound being somewhat musical in character.

Upon listening at the pulmonary and aortic cartilages the second sound was distinctly heard, so that these valves were evidently healthy. The murmur was always most distinctly heard at the

apex of the heart, and all the sounds of the heart pointed to regurgitation through the mitral valves. This, however, was not the only difficulty present. On examining the urine it was found to be highly albuminous, with a specific gravity of 1.028. The question arose at this point as to whether the kidneys were primarily or secondarily affected; from the specific gravity of the urine, and the fact that, as I show you, the kidneys are simply congested deeply, and do not present the evidences of organic disease, the opinion I expressed during the patient's lifetime, that the kidneys were secondarily involved, is borne out by the post-mortem examination.

Ascites is rather unusual in disease of the heart, or at least it is unusual to so great a degree as was present in this case. The large effusions into the abdominal cavity and into the lax connective tissue of the general system is accounted for by the congestion of the venous circulation, which was superinduced by the heart's defective condition; the whole of the portal circulation being congested, relieved itself by a simple process of leakage into the abdominal cavity, the blood vessels of the rest of the system following suit, the result being the production of so great a degree of dropsy as to seriously incommode the patient, if not, indeed, to endanger her existence. The patient's respiration was so seriously embarrassed by the presence of so large an amount of liquid in the abdominal cavity, that I determined to resort to tapping. I must warn you, however, that in these cases this operation is not entirely free from danger; for where a patient is weak and depressed, as this woman was, the chances are that she will become a great deal weaker under the process; still, if you deem it essential that the operation shall be performed, do it, but watch the patient closely while you are doing it. I drew from my patient fifteen pints of liquid, when, as she showed symptoms of syncope, I desisted and administered stimulants to her; after the operation she was greatly relieved, and rallied somewhat in her general health and condition. Upon her admission she was ordered half an ounce of the mist. Bash. with the infusion of digitalis (℥j) every three hours, together with 30 grains of the compound powder of jalap, the result being the free opening of the bowels and an easier condition of the patient. Upon looking at the lungs we find them healthy. The heart is hypertrophied and dilated somewhat; three fingers can be introduced into the mitral orifice, and from the ease with which they enter, I doubt not that when the organ was first removed from the body four could easily have found an entrance. The left auricle is dilated and its walls thinned. The aortic valves are healthy. The spleen is deeply congested. When she was brought into the ward we had but little hope of benefiting her, even temporarily; we could but temporize, and make her comfortable, which we attempted to do by means of digitalis, Basham's mixture, and stimulants; there was a temporary improvement, which lasted only for a few days, for, as the notes tell us, her cyanosis gradually increased, while the respirations became more shallow and frequent, her dyspnœa becoming so great that she was finally unable to lie down at all. Finally, the aromatic spirits of ammonia, in 30 drop doses, was administered every two hours. I should have added, when describing her general symptoms, that the pulsations of the heart were transmitted to the vessels of the neck, and could there be distinctly seen. The fluid withdrawn from the abdomen when she was tapped was alkaline in reaction, of a specific gravity of 1.009, and consisted of one-third albumen.

Erythema Nodosum from Rheumatism.

The girl I next bring to your notice is suffering from a disease which, if not identical in nature, presents many points of resemblance to that which produced the serious lesions in the case we have just been studying.

While rheumatism is, as a rule, a frank, well expressed disease, yet there are occasionally cases presented to our notice that would seem to belie this characteristic, and this, doubtless, is one of them. Her history is as follows: Eight days ago, she tells us, she took cold; that in consequence she suffered from sore throat, which was of an aggravated form; even now she has some remains of the throat trouble present. At the time that the attack of sore throat made its appearance she also fell a victim to indistinct pains and aches in the limbs. Now all this trouble would seem to have had its origin in the fact that for a number of days before the onset of the disease she had been working in a damp cellar, or underground kitchen. She had at the time more or less fever, and there still remains some elevation of the temperature, the thermometer registering 100°, the respirations being 22, and the pulse 88. Yesterday, there made its appearance, a dark red, nodular eruption, having its seat more especially over the anterior surface of the leg, the skin of which had, in the neighborhood of these spots, an infiltrated appearance. To arrive at a diagnosis of the skin affection, we must take these factors into account; the fact of the patient's having worked (probably, in an overheated condition), in a cold, damp cellar; the fact that she is aware of having taken cold; that fever was present, associated with rheumatic pains. Now, while we know that rheumatism is generally frank and open in its manifestations, we also are aware that it sometimes gives rise to insidious troubles, that, unless we are on our guard, will tax our best efforts to explain and refer to a cause. This erythema nodosum, or dermatitis contusiformis, is a disease in point; while it may occur, perhaps, as an idiopathic state, yet, as a rule, it owes its origin to a rheumatic attack, or to such causes as will ordinarily provoke an attack of this disease in a person subject to it. It is not a very common affection, nor an ordinary complication of rheumatism; it is more important, for this reason, that you should note this case carefully. From this reddened, infiltrated appearance the nodules gradually degenerate, passing progressively through the same stages as a bruise, becoming first black, then blue, and finally fading away through various stages of yellowness, till the diseased condition exhausts itself, and the skin turns to its normal condition.

Bearing in mind the rheumatic nature of this

disease, we should always use in its treatment the remedies which experience has shown us are useful in rheumatism. We, therefore, prescribe, as the fever is not high, twenty grains of acetate of potash, every two hours. In a case accompanied with much fever I should give salicylic acid; but this is unnecessary here. The prognosis is always favorable; the cases tend to get well, when uncomplicated, in a few days, with the treatment I have suggested. You see now how closely you must watch the manifestations of this peculiar poison; how two cases apparently entirely dissimilar, the one a very grave, the other an insignificant trouble, both owe their origin to a common cause, and yet that both will require, to a greater or less degree, the same general treatment, although the temptation is so strong to deal differently with them.

Dysentery.

In closing the hour I shall discuss before you the case of A. G., aged 26 years, a German woman who has been in this country only four weeks; she presents what is, at this time of the year, and in fact what is now, in this city, a rare form of disease, namely, dysentery. The family consists of herself, her husband, and two children. She tells us that while menstruating she caught cold and was seized with a chill, which was followed by pain in the bowels and decided purging, under which latter she rapidly lost strength, the tongue being covered by a brownish-colored fur. The abdomen, upon examination, has a flattened appearance, and upon pressure in the left iliac fossa pain is elicited; this, however, is diffuse. The stools of these patients should always be carefully examined, not only as to their nature, but also as to their number; the mere statements of nurses and friends should not be relied upon in regard to either particular, for their statements, especially as to number, are apt to be colored by their fears and anxieties. It is, therefore, a good plan to make the nurses keep a record of every passage; in this way some idea may be obtained of the progress being made in the treatment of the case. In the case before us thirty-eight movements of the bowels took place within the first twenty-four hours after she came under our care. Now she has but fifteen in the same period of time. The examination of the stools, while not a pleasant duty, is yet a necessary one, for important diagnostic signs are discoverable in them, especially where a case, as the present, occurs in the middle of an epidemic of typhoid fever; the stools, under such circumstances, will oftentimes enable us to recognize at once the disease from which the patient is suffering. The stools of the patient before us were scanty, consisting almost entirely of blood and mucus, with little or no fecal matter. There is no hebetude, no tympany, no rose rash, and no pain in the right iliac fossa, and the patient tells me that before a movement of the bowels she suffers from pain of a griping character, or as we say, from tormina, together with rectal tenesmus. Her tongue does not present the appearance seen in a typhoid fever case in the second week. The temperature was high when she was admitted, running from 100° to 101°, but it has since fallen off; there was a difference of two degrees between the morning and evening observations; the thermometer readings are different from those of typhoid fever in the second week; this is another point in diagnosis. This disease is far more rare than it formerly was; more or less of it was always seen in this hospital at certain seasons of the year, notably so in the fall, when malaria was prevalent in certain sections of the city. The question has been hotly discussed as to the contagiousness of dysentery. I think myself, that under certain circumstances it is highly so. Take, for instance, the present case not only the mother, but the whole family, are down with the disease; she was the first and most seriously affected. She tells us that the four of them lived in a room together, and the probabilities are that the chamber was not emptied as often as used, and that from the passages thus retained in the room the rest of the family absorbed the poison. I had under my care at the Children's Hospital, eighteen months ago, four children with this disease, and they also were not the only ones of their family affected by it. The father and mother died of it, and three other children were also sufferers from it. From investigations which were made, it became evident that the father and mother had contracted the disease from constant exposure to emanations from the stools, which were allowed to remain for hours in the sick-room, while nursing a son. I cannot doubt but that where a person is exposed constantly to an atmosphere poisoned by the emanations from the stools of a dysenteric patient, he too will fall a victim to the disease, in a more or less aggravated form. The question is one that has been and is being widely discussed, and I can but add my experience to that of others, in order that by comparing notes we may eventually hope to arrive at the true solution of the question.

As to treatment: I did not see this woman till eight or ten days after the début of the disease, consequently the first violence of the symptoms had somewhat subsided, or else I would have treated her somewhat differently from the way I have. I administered to her ℥ ss of castor oil, with gtt. v of laudanum. Now this may seem to many of you strange treatment for a woman who already was having fifteen to thirty stools a day; but when you pause to consider that with them all but very little fecal matter was found, you see the reason of its administration; the result was a copious discharge of fecal matter, followed by a great sense of relief. After this the bowels were left alone, so far as purgatives were concerned, and a sedative astringent was administered, acetate of lead in two grain doses, combined with half a grain of pulv. opii, being given every four hours. Under this treatment she began to mend rapidly, but it is essential when you give this medicine that the patient should be watched carefully, in order that lead poisoning may not be induced by it. With this danger in view, on the third day I changed my prescription to the nitrate of silver, giving the one-third of a grain at a dose, together with one-quarter of a grain of opium ter die. The nitrate of silver is particularly useful in chronic, or sub-chronic dysentery where the ulcers left by the disease are disposed to cicatrize, it will undoubtedly promote the pro-

cess; but neither it nor the opium must be pushed indefinitely. The silver, after a time, tends to discolor the skin, but there is no danger of this accident occurring if the use of the drug is stopped at the end of from ten to twelve days; by examining the gums daily this danger need never be incurred, for these will show the silver discoloration before the deposits in the skin are noticeable. In treating dysentery, I have very great confidence in injections into the bowels. The pain in this case was complained of as being very low down, just over the sigmoid flexure, and I concluded that benefit would be derived from an injection, at first once a day, and then oftener, of a pint or more of water, holding a little nitrate of silver in solution; as this would by itself tend to increase the peristaltic action, a suppository of opium was introduced into the rectum immediately after the injection. Now we have, in a week, the passages reduced from thirty eight to fourteen or fifteen a day, the temperature normal, and nearly all febrile symptoms gone. An important point in these cases is the administration of suitable diet; nothing but fluids should be allowed; milk alone, or, if necessary, combined with stimulants, is the best food; beef tea can be used, and when the ulcers are low down, I should not hesitate to permit small pieces of meat cut fine and masticated thoroughly. Keep such a patient absolutely at rest and in bed; make her use the bed-pan, and do not allow her to rise for any purpose; this is of the greatest importance, as one of the first and great objects of the treatment is the conservation of strength, so necessary in order to weather the tremendous drain which such frequent passages make upon the system.

Medical Societies.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

STATED MEETING, FEBRUARY 2D, 1882.

Sponge Tents.

Dr. Albert H. Smith. It is not necessary to dilate upon the necessity of mechanical dilators for the neck of the uterus, both as a means of diagnosis and as an important therapeutic measure.

The original sponge tents were made from a flat piece of sponge, saturated with wax and pressed flat betwen pieces of marble. This form of tent is comparatively useless, as it expands in one direction only. The first suggestion of the present form was, I think, by Dr. Sims, in his work on Uterine Surgery. His method consisted in immersing a conical piece of sponge in a strong mucilage of gum arabic, impaling it upon a wire skewer and winding it tightly with a cord, after which it was hung up to dry, when the cord and skewer were withdrawn and the tent smoothed with sand paper. If the cord was wound on the sponge with sufficient tightness to give the tent useful expanding power, great difficulty was experienced in withdrawing the stylet. I was led to make a few changes in the method, and now employ a cylindrical piece of sponge, which is saturated with water only, and, without any stylet, is wound with a piece of fishing line, to which a six-pound weight is attached; this compresses it thoroughly, and its form is easily given by the fingers during the process of rolling; the surface should be made as smooth as possible, by means of sand paper.

The tent should be of uniform size from end to end. If it is conical, the tent is introduced as far as possible; but only the small part, without much dilating power, enters the internal os, and it is not unfrequently withdrawn unexpanded, while the external os and the cavity of the cervix are widely dilated. The sponge selected should be strong and fine. I have seen tents made from coarse, rotten material, which would break during the extraction, leaving portions within the cavity of the uterus.

The introduction of medicating materials into an internal cavity of the tent is objectionable, as they usually corrode the sponge, and the space and loose winding necessary to allow the removal of the stylet reduce materially the dilating power. The curved shape is useless, as the uterus can be straightened before the insertion of the tent, and less force is needed for the insertion of a straight one.

To prepare the uterus for the introduction of a tent, first use a dilator of soft metal, or a graduated wax bougie, to straighten the cervix and measure the length and calibre of the uterine cavity, noting tortuosities, etc.; then rapidly introduce the largest tent possible, having first coated it with an enameling material, as soap, and immersed it in a box of salicylic acid in fine powder, which is to be rubbed in thoroughly, to form an antiseptic paste over the tent.

A sponge tent thus prepared may be allowed to remain in situ for forty-eight hours without developing any unpleasant odor, unless there is breaking down tissue which may overpower the disinfecting powers of the acid.

For ease in inserting, I have had constructed a peculiar powerful forceps to hold the tent clamped tightly, and enable the operator to pass it rapidly to its position. Hot water injections after the tent is in position will expand the sponge rapidly and fix it in about a minute. If pain follows the insertion, it can be controlled by opium suppositories.

Time of removal: If the tent is removed at the end of twenty-four hours, it will cause hemorrhage, because the spongioles have buried themselves into the cervical tissues, which grasp them tightly, and a forcible extraction will drag away portions of the uterine tissue and leave a raw and absorbing surface. But at the end of forty-eight hours the tent comes away easily, without any bleeding. The contractile power of the uterus still remains at the end of twenty-four hours, and the presence of a finger or application in the cavity of the uterus causes rapid contraction. At the end of forty-eight hours the uterus is paralyzed, all pain has ceased, and local irritability is less. When the tent is removed, wash out the cavity of the uterus with tepid, salicylated water, and, if necessary, introduce a second tent.

Among the advantages of the sponge tent are its slowness of dilatation—not slowness of expan-

sibility. The power of the laminaria tent is greater as a dilator, but it will slip from the uterus as soon as it has ceased expanding, while the sponge tent will remain as long as it is wanted to. The sponge has also a disintegrating power over morbid surfaces. The healthy tissue will contract again, but diseased structure will not contract but will slough off, its vitality being destroyed. The sponge being porous, discharges will pass through it.

The usefulness of the sponge tent is for both exploratory and therapeutic purposes. It causes less pain than the laminaria tent, and after its removal there is less tendency to contraction, and it is thus more satisfactory for exploratory preparation. The sponge has a stimulant effect on the uterine parenchyma, and in cases of chronic metritis and hyperplastic enlargement it will cause a reduction of bulk. In one case, after the prolonged use of internal applications of iodine, nitric acid, etc., the repeated use of sponge tents resulted in a complete restoration to the natural size. In cases of stenosis the laminaria tent may be preferable, and I prefer it to cutting operations or the use of powerful steel dilators. In one case, years ago, I introduced a sponge tent, in my office, and allowed the woman to walk home and keep about her daily duties. The menstrual flow came on two days later, entirely without pain, for the first time in the patient's experience ; the flow escaped through the sponge and the latter was then removed. Conception occurred before the next menstrual period. The sponge tent is also the safest agent for the destruction of granular growths of the endometrium. A patient had been bleeding profusely at every period for three years; supposing a polypus to be the cause, a sponge tent was introduced, to secure dilatation ; a finger was introduced into the uterus but finding no polypus, more tents were passed to the fundus ; fungoid growths of the endometrium were broken up by the tents. I was disappointed in my expectations of finding and removing the supposed cause of the hemorrhages, but was agreeably surprised to find the patient remain well after the uterus contracted. Another patient was sent to me from Boston, for diagnosis only. I obtained permission to use a tent for exploratory purposes. I dilated the uterus with the largest sponge tent, passed to the fundus, introduced my finger and found fungosities on the anterior wall, but the means intended for exploration resulted in a cure.

In a case of polypoid pediculated growths, I at once dilated with sponge tents, after the use of the wax bougie ; the finger found a pediculated growth as large as a hen's egg, but the tent had disintegrated it, and it could be removed by the finger without instrumental aid.

Dr. B. F. Baer reported the following case: In September, 1880, I was asked by Dr. Ch. K. Mills to see Mrs. M. K. She was aged thirty-two, and had had six children, the youngest having been born four years previously. The last labor had been tedious, from uterine inertia, and was followed by a smart post-mortem hemorrhage. Since then she had suffered from a recurrence of metrorrhagia about every two weeks, lasting from a week to ten days each time, and very profusely. The blood loss was attended by severe uterine tenesmus. In the intervals between the hemorrhages there was a constant mucous leucorrhœa. She complained of pain in the hypogastrium and back. Her appearance indicated anæmia and loss of flesh.

Physical examination indicated the following condition: The perineum was slightly lacerated and the vagina relaxed. The cervix uteri was large, soft, from congestion, and lacerated bilaterally, with a swollen, everted and abraded mucous membrane. The body of the uterus was hypertrophied and retroverted, with a slight flexion at the junction of the body and neck. At the point of flexion there was such rigidity of the posterior wall, probably from atrophy, that, when the uterus was replaced, it would return to its old position as soon as released. The sound passed three and a half inches, and proved the uterine cavity to be dilated, and its walls soft and rugous. The internal os, the point of flexion, was quite narrow.

This lady had received proper general medical treatment from her brother, who is a prominent physician, and from others, and during the year previous to coming under my care, she had received local treatment, but with no benefit, so far as the metrorrhagia was concerned.

I diagnosticated, as the cause of the hemorrhages, a hypertrophied, granular condition of the endometrium, the result of subinvolution and retroversion of the uterus, with possibly a polypus.

The plan of treatment pursued was absolute rest, vaginal injections of hot water, reposition of the uterus by placing the patient in the knee-chest position, and scarification of the cervix; followed by an application of Churchill's tincture of iodine once every six or seven days. Ergot, and the tincture of nux vomica, with quinia and some other remedies, were administered internally. The constriction at the internal os made it difficult to medicate the cavity of the uterus properly, and it was thought more prudent to await the result of less radical measures. The result, however, was not gratifying, for the hemorrhages continued to recur with as much, if not more, severity than before. I now introduced a laminaria tent and allowed it to remain about twenty hours. I then removed it with some difficulty, for it was grasped firmly by the internal os, the contraction at which point it had failed to fully overcome. The canal was now patulous enough to permit me to pass the dull wire curette, with which I removed, very easily, a large quantity of hyperplastic or granular mucous membrane. But my patient's temperature was up to 100° before I removed the tent, and her general appearance indicated trouble ahead. It is sufficient for my purpose to state that in spite of every effort to combat it, the temperature continued to rise, and the case gave every evidence of septicæmia, with metritis and perimetritis, and went from bad to worse, until death took place, nearly three weeks after the introduction of the tent. Full precautions were taken to guard against septicæmia.

Why did my efforts to benefit this lady end so disastrously? Ought I to have waited, and given a further trial to less dangerous means of treatment? The patient had been in the care of a

competent gentleman for a year before, and he had pursued that plan most faithfully, with no relief, and my own treatment of the case, before I introduced the tent, had continued over a period of two months, and with a like result; the patient was going down hill, and something more had to be done.

Was the result due to the use of the curette? I do not think so, for the material removed was soft and degenerated. It would have been bad practice to have allowed it to remain.

Should I have used a steel dilator instead of a tent? The tent was used for the purpose especially of softening the indurated tissue at the internal os. The steel dilator would not have done that; and it was very desirable that the os should be made patulous by softening of the tissues, so that the body would contract and disgorge the vessels in its walls. The steel dilator would not have fulfilled the indication so well, but it would have been a less dangerous means of dilatation.

Was the operation deferred too long, until, from the loss of blood, the vessels were eager to absorb any fluid which came within their reach, and the blood itself so disabled that it could not purify itself when poisoned? I believe that comes near the truth.

I do not report this case as an argument against the use of tents, but because I believe all such cases should be reported, so that we may not be led to regard dilatation of the cervix as a simple measure, devoid of danger.

This is the only case of death I have had to follow dilatation with the tent. I have never had a case of death to follow dilatation with the steel instrument.

Dr. E. L. Duer described a method of preparing a sponge tent expeditiously. Take a clean sponge, of cylindrical form, dip it into melted wax, or paraffine, and compress it into form as it cools. Tents may be introduced, when speculum and forceps are not at hand, by wrapping the string attached to the tent around the forefinger of the right hand and inserting the thumb nail into the base of the tent. The first and second fingers of the left hand are passed behind the cervix; the tent is then introduced into the os uteri, and the left hand being quickly transferred to the abdomen, counter pressure is made and the tent forced home. Pain following the insertion of a tent is frequently the consequence of pressure upon the fundus, and if the tent be withdrawn one-fourth of an inch the pain will be relieved. The sponge tent is, without doubt, one of the most powerful means for the reduction of uterine hypertrophy.

Dr. Paul F. Mundé agreed with Drs. Smith and Duer, that sponge tents were indicated in uterine hypertrophy and granulations of the endometrium. He has never had any bad results from dilatation of the uterus by mechanical dilators of any form; but he has withdrawn very offensive sponge tents after twenty-four hours' use, and feared danger might be near and wished to avoid it. He can get tupelo tents of any size; they dilate, not too rapidly, but regularly and strongly, and he preferred to use them, as he was afraid of sponge tents.

In a conversation at Richmond, Va., last May, Dr. Smith said that he had views of his own, and thought the sponge tents were unreasonably looked down upon.

Dr. Mundé agreed with Dr. Smith as to the method of application. He always made use of three steps in the insertion of a tent. He placed the patient in Sims' position. The cervix should be exposed properly and seized by a tenaculum; then the tent, being properly held in a strong forceps, is dipped first into a jar of liquefied carbolic acid, then into a jar of vaseline, and then rapidly passed into the previously cleansed uterine cavity; quickly, if the tent be not too large; if there be any point for it to catch upon, it will catch. At the end of twenty-four hours he always removed the tent, and they were pretty nasty sometimes. He always dreads some bad result, but has been fortunate, so far, and has not seen any. He now uses the tupelo tent, and treats it in the same manner that he previously did the sponge tents. It is easily introduced, it becomes fastened in a few minutes, its effects are good; the patient does not complain of much pain; it does not imbibe so much as sponge and does not sink into the uterine tissue as the latter does, but it is not so efficient in reducing the size of the hyperplastic uterus, for there is nothing else so good as sponge for that. After a tent is removed the uterus should be thoroughly cleansed.

In cases where the sponge was successful for the relief of sterility, a tupelo or laminaria tent would probably have done just as well. A sponge tent increases discharge and causes local irritation, and its removal involves loss of epithelium, and for these reasons it is not generally so good for relief of sterility. As the sponge tent is rough, it sticks, and is introduced with great difficulty if it be of large size in proportion to the calibre of the internal os.

It is a maxim, that a sponge tent must not be introduced into a fresh wound, and does not the dilator or bougie cause a fresh wound? The sponge tent is undoubtedly the best for hyperplasia, but all the other indications are filled by the laminaria, or tupelo tents.

He had experienced the same difficulty as Dr. Smith, in the tapering tent, and had, therefore, cut off the small end of the tent. A Molesworth dilator is open to the same objection in some cases, not dilating either os, but expanding largely in the space between; the conical tent does the same thing; blunt sponges are very difficult to insert; the laminaria has dilated in the cavities of the cervix and body of the uterus, with an hour-glass constriction at the internal os, and it was withdrawn with great difficulty. The tupelo tent dilates more equally, and also more slowly; sponge tents are also hard to withdraw, and should be twisted before traction is made.

Dr. Duer suggested twisting ino ne direction only, allowing the grasping instrument to be drawn in by the shortening during twisting, until the tent was entirely loose. On one occasion, a piece of tent broke off and remained inside the uterus, but it was extruded by uterine action, and was found in the vagina the next day.

Dr. J. Cheston Morris had found out the uselessness of conical tents, unless inserted in a reversed position; he prefers the cylindrical form.

The cases of death from sponge tents were probably due to the use of three successive tents at intervals of twenty-four hours; he prefers to allow a tent to remain from forty-eight to seventy-two hours; he has never had any serious results; but in consequence of the tents being disagreeable and troublesome, he now uses Molesworth's dilator, and with great satisfaction; but they are badly made, they leak, and are apt to break under necessary pressure. In one case he burst three dilators before he succeeded in effecting complete dilatation. He agreed in the usefulness of this method of treatment for hyperplastic enlargement, and thinks that in many cases it acts in imitation of a miscarriage; expansion, then contraction, with the aid of ergot, will cure chronic metritis and enlargement. He is now using large soft-rubber stems to effect a similar purpose; they gradually overcome the resistance of the internal os, and expand it. He has never used the tupelo tent. In his opinion, it is far safer to allow a tent to remain two or three days than only one. In removing a tent, push in slightly at first, and then make traction with a curving motion. He thinks the position on the back far easier for introducing a tent than Sims' position. He has introduced tents in the manner described by Dr. Duer, without speculum or forceps.

Dr. Mundé. Where should tents be applied? At the office? What should be done with the patient after the insertion of a tent? It is very reprehensible to introduce a tent unless a patient can be kept in bed for one or two days after the removal of the tent; this is a very important point. He is accustomed to introduce all tents in the Sims position, and through Sims' speculum, and has not succeeded so well on the back, because the tent easily becomes rough if not quickly pushed to its place. He introduces the sound, and frequently the hard stem, on the back, pushing the uterus down over the stem by pressure above the pubes.

Dr. A. H. Smith. Success in the treatment of sterility by means of sponge tents depends upon the relation of the time of insertion to the menstrual period. If used just before the period, it dilates the uterus and expends all its malign influence before the time at which the uterus is expected to receive the impregnated ovum. The tupelo tent fails in fulfilling the indications, as it would not allow the flow to pass through it (unless perforated), and it could not pass beside it, if large enough to be of benefit. He had commenced to use tupelo tents when they were first introduced; he found them very spongy and soft, with slight dilating power, and easily constricted by the internal os; he did not find it to have any advantages over the laminaria or sponge tent; it has great powers of absorption, and had the appearance, when new, of having been used and dried again. ("The tupelo tents are much better made now, are hard, smooth, and have greater power."—*Dr. Mundé*).

Respecting the use of the bougie before inserting a tent: The bougie does not cause a tear or abrasion of the surface. The wax bougies are flexible, pointed and graduated in form; he has never seen bleeding follow their use; he has never used a steel bougie. He considers that there is far less risk than from the use of mechanical dilators, of which he is much afraid.

There is no difficulty in introducing a cylindrical tent, as it dilates uniformly from end to end, and a smaller tent answers the purpose, as the important point is the internal os; that is where the largest amount of tent is needed. He prefers the position on the back, the relation of parts is more natural and the uterus is more easily straightened by pressure on the fundus above the pubis, making introduction easier.

Tents should never be introduced in the office; it is very reckless; the patient should be put to bed and cleansing injections should be used.

The further discussion of mechanical dilators of the uterus was postponed to the meeting of March 2d.

Editorial Department.

Herpes as an Underlying Cause of other Diseases.

Dr. Moré y Bargit, contributes to the *Revista de Ciencias Médicales.* (*October 25th*, 1881), of Barcelona, an interesting article on the above subject, in which he says:—

Many diseases are treated as idiopathic which in reality are only symptomatic of herpes. This diathesis often gives rise to certain functional disturbances, such as asthma; or again, to more or less extensive ulcers in different parts of the body; cases of blennorrhœa which had resisted all treatment have yielded when arsenicals were exhibited, which is an evidence that they originated from some herpetic vice; if need be, such examples might be multiplied.

As regards asthma, he mentions the case of a man fifty years old, who, in 1879, applied to him for treatment. For the past three or four years he had suffered from severe periodic attacks of asthma, which had resisted all usual forms of treatment. The patient was otherwise in good health, strong, and observed no signs of organic lesions of the heart, or lungs.

On being questioned as to whether he had ever noticed any external signs of herpes, he replied that occasionally he had been subject to a *rose-colored eruption* on the inner face of the arms and over the scrotum, but that it was a very long time since he had been thus troubled, and further that this came to him by inheritance from his father.

Upon these indications the administration of arsenicals was deemed judicious, and he was

advised to continue their use, because if they did not effect a cure, they would certainly bring relief. After a time the *rose colored eruptions* again appeared, and since then he has not suffered from asthma.

In cases of ulcer, these are often due to herpetic taint, and their origin reveals itself when they yield to arsenical treatment. With reference to blennorrhœa, the Doctor, about a year ago, met with a chronic case, in a man, which had resisted every form of treatment. The patient stated that prior to the present blennorrhœa, he had suffered from herpes over the genital organs, that this had entirely disappeared when the blennorrhœa showed itself, and that the herpes had caused him great suffering, owing to intense itching of the parts, while it lasted; he believed that the blennorrhœa was due to a suppression of the herpes. Acting on the indications thus furnished by the patient, arsenicals were prescribed, both internally, and in urethral injections, and at the end of ten weeks, he was entirely cured.

Recently a case of catarrhal conjunctivitis, in a woman, was traced to the presence of herpes, and disappeared under arsenical treatment. I might adduce many other examples, "the doctor says," but it will be enough for the present to detail the following case:—

The patient was a girl, twenty-one years old, of rather weak constitution, and sanguineous disposition, but showing no indications of any particular organic lesions. The menses were regular; however, her appetite was poor, and her digestion slow and difficult, although unaccompanied by any intestinal troubles.

I first saw her on the sixth of last February. According to her statements, for the last six years she had been suffering from ulcer of the womb, and from such severe attacks of asthma that, while they lasted, she was obliged to leave her work (dressmaking), and divest herself of almost all her clothing, so great was her difficulty of breathing.

During the summer she derived great benefit from going out of Barcelona; but as soon as she returned to the city her asthma again came on. She had been all that time under the same physician's care; he had treated the asthma with all kinds of powders, pills, etc., and, according to her say, had given her over a hundred hypodermic injections of different remedies, all without effect.

The ulcer from which she suffered was situated on the right of the neck of the womb. It was about the size of a silver half dime, and was the seat of a somewhat thick leucorrhœal discharge. For the last six years caustics and astringents of all sorts, and even the actual cautery, had been applied, without avail. The patient being always accompanied by her mother, I could not question her, although I had some doubts. It however occurred to me to ask the mother if any of the family had ever been subject to herpes. She replied that they all had been more or less thus affected, including her sick daughter, and detailed various circumstances which corroborated this assertion. This left no doubt but that the asthma and ulcer were due to herpetic taint.

I, therefore, determined on submitting the patient to the following arsenical treatment: For the first week she was given, daily, one-sixth of a grain of arseniate of soda; the second week, one-third of a grain, and thus progressively each week, until five-sixths of a grain daily were reached. We then stopped off for a week, and again commenced the treatment afresh. For the topical treatment of the ulcer, I made use of Ferguson's speculum, and every other day applied a solution of alum. The leucorrhœa was thus gradually reduced, the ulcer healed, and everything returned to its normal condition. The patient recovered her appetite and strength, her color was improved, and the attacks of asthma became milder, and less frequent, until finally, in August last, she was entirely cured.

This shows the influence of herpes in a variety of diseases which at first sight may seem idiopathic, but which, upon careful investigation, prove themselves due to other causes.

Linear Rectotomy for Syphilitic Stricture of the Rectum.

The *British Medical Journal* reports the following case which was operated upon by Mr. Berkeley Hill, in the University College Hospital:—

The patient, E. W., a woman, aged 26, was admitted on May 10th, 1881. She stated that up to about three years before her health had been good, but that since then she had never been well. The history of her illness pointed very clearly to the occurrence of syphilitic infection in the spring of 1878. She first experienced some pain about the vulva, followed by a lump in the groin, which broke and discharged. At about the same time she had a sore throat, general eruption of the skin, and falling of hair. Soon after these symptoms, she began to experience pain during defecation, and some small piles appeared; she noticed also that the fæces became smaller, and that she had some difficulty in emptying the bowel. On admission, the patient stated that the bowels were always confined, and that there was much pain and straining at stool; the motions were stained with blood and matter, and there was a constant discharge of blood and matter from the anus. When examined, the margin of the anus was found to be indurated for about two inches. Close to the outlet it was raised in several places into ulcerating nodules; but there were no piles, properly speaking. The gut, for about two inches above the outlet, was uneven and ulcerated, and so much contracted that the finger was clipped as it passed inwards. The stricture terminated at the upper end by a sharp edge, resembling a band; through this the tip of the finger passed.

On May 18th, the patient having been brought under the influence of ether, Mr. Hill introduced one finger into the rectum; he then passed a large curved needle, threaded with silk, through the skin in the middle line just in front of the coccyx, and pushed it on behind the rectum, until it had penetrated to the cellular tissue between the sacrum and wall of the rectum above the indurated part. The point of the needle was then carried into the rectum, the silk thread seized

with forceps, and drawn out through the stricture; the needle was then withdrawn the way it had entered, leaving the silk ligature in its track. To the silk ligature was then attached a strand of wire, and the wire introduced into the track of the needle by pulling on the silk. The two ends of the wire were then attached to an *écraseur*; by tightening the wire the included tissues were divided in the middle line, with very slight hemorrhage. A morphia suppository was introduced and the wound was plugged with dry lint.

On May 25th, a week after the operation, the temperature being then normal, and the patient free from pain, Todd's dilator was introduced, and expanded to three inches in the antero-posterior direction, and two and a quarter inches in the transverse. This expansion of the cicatrizing wound caused very little pain or bleeding. The dilatation was repeated on May 27th and 31st, and on the latter date bougies were ordered to be regularly used.

On June 3d the act of defecation was easy, while the sphincter had regained complete control of the anus.

The patient was discharged on June 4th, seventeen days after the operation. The highest point touched by the temperature was 101.6°; this was on the evening of the day succeeding that of the operation.

This method was chosen in preference to gradual dilatation by bougies, because the latter is so painful, and affords but temporary relief. Anti-syphilitic treatment was ordered to be continued for some time, in order that any new development of the sclerotic tissue might be absorbed.

Treatment of Ozæna.

Dr. Cozzolino, of Naples, has recently written a monograph on this subject. He recommends a pomade as follows:—

℞.	Hydrarg. chlor. mit.,	gr. xxx
	Sodii benzoat.,	℥ iiiss
	Sodii salicylat.,	gr. xv
	Thymoli,	gr. j
	Iodoformi,	℥j
	Ung. petrolei,	℥ ss
	Acidi tannici,	gr. j
	Rosar. essentiæ,	℥j. M.

This to be applied locally, after detersive injections, by Weber's nasal douche.

He recommends prudence in the application of mercurials, and attaches particular importance to a general anti-scrofulous treatment.

For ozæna from atrophic rhinitis he recommends benzoic acid, certain mineral waters in douches or in powder, such as the water of Saint Christau, justly extolled before him by Dr. Tillot, and that of Casamicciola, etc.

He is no partisan of the tampons of cotton-wool of Gottstein, and prefers to them medicated bougies of gelatine of a form invented by himself—a conical form and 3, 4, or 5 centimeters in length, adapted to the calibre of the nasal fossæ. The object of these gelatinous bougies is that they may remain upon the diseased surface in order to obtain their full action. They are made up with the following ingredients.

1. *Astringent or Anti-catarrhal Gelatinous Bougies.*—Subnitrate, tannate, and salicylate of bismuth, pure tannic acid, sulphate of zinc, and sulpho-carbolate of zinc.

2. *Emollient or Solvent Gelatines.*—Chloride of sodium, chlorate of potash, chloride of ammonium, neutral alkaline carbonates, employed to dissolve the inspissated secretions in some cases of dry rhinitis.

3. *Modifying or Resolving and Specific Gelatines.*—Preparations of iodine and of mercury, as, for example, iodoform, calomel, or red precipitate. For specific cases, the iodide of sulphur in herpetic lesions, and corrosive sublimate in syphilitic affections.

4. *Anti-fetid or Disinfecting Gelatines.*—Vegetable charcoal, thymol, salicylic acid, and phenol.

The washing ought always to precede the application of the gelatines and the insufflation of medicated powders. The gelatines are applied alternately in each nasal fossa, especially in the evening. In the morning we ought to introduce the bulb of the nasal douche in the opposite nostril to that in which the gelatine had been applied the previous evening.

Temperature in Childbed.

Dr. Napier gives the following conclusions on this subject in the Edinburgh *Medical Journal*, November, 1881:—

1. The average temperature for a few days preceding parturition is 98.5° to 99°: the subsequent heat is modified by the hour of delivery, but to only a small extent. The healthy puerperal range is 2.5°.

2. No temperature over 99° (unless accounted for by individual nervous susceptibility) is normal after four days. The healthy patient may have an *occasional* night temperature of 100° or 101° within the first four or five days, but a continuing, or even a morning or day record like this requires an explanation.

3. Slight causes, *e. g.*, constipation, retention of urine, etc., give a rise to 99°–100.5°, sometimes more.

4. Retention of clots or secundines, 99°–101°, or upwards; 103° at times.

5. Weid has a sudden late temperature of 103 5°, with rapid pulse; the heat falls quickly with the development of the local affection. Other cases of mastitis are mildly febrile for several days.

6. Metritis (endo- and peri-) gives record of 103.5°, with slow pulse.

7. Peritonitis has a single rigor and a sudden early temperature of 104° or upwards; the pulse is wiry. General peritonitis, if severe, 105.5°–106°.

8. Pelvic cellulitis, oöphoritis, parametritis, etc., have a heat of 101°–102.5°; the pulse is weak and irritable. Recurrent rigors mark fresh deposits of pus, and are followed by temporary increased heat, 104.5°.

9. Pyæmia and uterine phlebitis average 103°, perhaps more. Cases in which the veins are rapidly affected are soon 104.5° to 106°, and end speedily. Pyæmia is frequently late in development, 7 to 10 days.

10. Septicæmia varies from 102.5°–107°. The

heat is never less, at least for some period of the twenty-four hours, than 102.5°, if the case is properly established. The temperature is liable to variations, but after the norm has been reached is less so than pyæmia. There is no security from remission till the night temperature is under 100°. Recovery may take place after 106°, but is rare.

11. Mental emotion may show 104° or even 106°, and we may sometimes have in addition symptoms resembling metro-peritonitis. These cases do not persist, and are generally normal in less than forty-eight hours.

12. If the temperature does not rise within ten days from delivery, there is little risk of grave disease, unless from gross imprudence in exposure to cold, or zymotic infection.

13. Although the temperature is moderately low, 100°–101°, so long as the pulse continues 120 or more we are not safe from relapse. No anxiety need be felt so long as the temperature is kept under 102°. However fast the pulse, if the temperature continues low the prognosis is favorable. An evident exception pertains when temperature is low from collapse. If the temperature is persistent at 102°, or frequently recurs to this point, there must be an abnormal organic condition.

14. Temperature should be observed night and morning for the first seven days, and daily for three to seven days after, more especially if any instrumentation has been required for delivery, or if zymotic or epidemic disease prevails. When an abnormal temperature is discovered, it should be reduced to the normal as early as possible by one or other agent. It is of the highest moment to bring it down to 100° and *keep it* there or lower.

Therapeutic Effects of Damiana.

In *Paris Médical*, No. 48, we read that Damiana Turnera Aphrodisiaca is a herbaceous plant belonging to the Portulaca family, and growing in Brazil and on the western coast of Mexico. Its flowers are white, and have the odor of buchu. It is gathered during August, while its stems are covered with an odoriferous gum-resin.

Damiana has for a long time been used among the Mexicans as a tonic; its stems and leaves are made into a decoction, which is taken to restore strength and nerve energy. It is also given in cases of impotency in either sex. It exerts a specially tonic and stimulating effect on the genito urinary organs of both sexes, and when given in medium doses, acts as an aphrodisiac, an alterative, and a laxative, with a tendency to increasing the urinary secretions and developing sexual desires. In small doses, it appears to have specific tonic effects on all the pelvic organs, and gives increased activity to the secretions. It is also recommended as a nervine.

Damiana, could, therefore, be used as an aphrodisiac in spermatorrhœa, in atrophy of the testicles, and in incontinence of urine; also as a powerful stimulant of the cerebral faculties, and in all accidents attending premature labor, in difficult menstruation, and in the diseases following gestation.

The effects of damiana are quite different from those of strychnine, phosphorus, or cantharides, which are given in small doses, for the purpose of obtaining immediate results. It acts, not as an irritant, but as a stimulant of the brain, and a tonic of the nerve centres governing the urino-genital apparatus, and its use has to be continued for several weeks. Its effects are chiefly noticeable on the sympathetic nerves, and when taken in large doses, it produces a peculiar intoxication, attended with slight pains in the prostatic region. Its good effects on the kidneys, the bladder, and the genital organs, are also manifest.

In doses of a teaspoonful three or four times daily, continued for several days, damiana has a pleasant laxative effect. The fluid extract is generally prescribed; it is combined with equal parts of pure glycerine, or syrup of tolu, or a fruit syrup of some kind. It may also be taken in wine. It is given in doses of thirty to sixty grains, three or four times daily. A solid extract is also prepared, of which the dose is thirty to sixty centigrams, (= gr. iv ss—gr. ix).

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Soluble compressed pellets, a new form of remedies for hypodermic use, and applicable to ophthalmic and general medication. By H. Augustus Wilson, M.D., Ophthalmic and Aural Surgeon to St. Mary's Hospital, and Pathologist to the Presbyterian Hospital, Philadelphia. This little pamphlet comes to us in the form of a reprint from the Transactions of the American Medical Association, 1881.

Dr. Wilson claims the following advantages for this method of preparing drugs:—

1. The convenient size of the pellets.
2. Their immunity from change.
3. Their accuracy of contents and dose.
4. Their certainty and rapidity of action.
5. That they may be used by the mouth.
6. Their adaptability to ophthalmic medication.

——An experimental and clinical inquiry into the etiology and distinctive peculiarities of Traumatic Fever. By B. A. Watson, M.D. This is an extract from the Transactions of the American Medical Association.

——Fifteenth Annual Report of the Columbia Hospital for Women and Lying-In Asylum, for the fiscal year ending June 30th, 1881, comes to us from the Government printing office at Washington.

——Annual Abstract of Ophthalmological Literature. By C. S. Turnbull, M.D. This essay is familiar to our readers, since it is a reprint from the Medical and Surgical Reporter.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

SPECIALISM IN MEDICINE.

The position of the specialist and the relation which he ought to hold to the general practitioner, is accurately and concisely set forth in the following communication to the London *Lancet*. "Some specialties seem to have got a firm footing among us, and it would not be fair to deny that, honestly practiced, they are of service to the profession and not to the public. But I venture to suggest that, in most, if not all cases, the specialist should be a consultant, pure and simple, and his advice sought only in conjunction with the ordinary medical attendant, or on the recommendation of an *all round* physician and surgeon." This truly ought to be the sphere of the specialist, and were such the case, no objection could be urged against specialism in medicine, since it would be productive of very much unalloyed good.

It is universally admitted that when a man labors day after day in the same line of thought, his perceptions become contracted, his opinions biased, and his jugdment, outside of this special groove, faulty. When a man devotes his life to the exclusive study and treatment of affections of the eye, he soon falls behind the progress of the day, in general medicine, and when called upon to treat a patient, no matter what the nature of the departure from health may be, he is very prone, oftentimes unconsciously to himself, to view the diseased condition through the agency of his favorite and most familiar instrument, the ophthalmoscope, and to give undue prominence to any ocular symptom that may be present, to the neglect or absolute disregard of the more important element which is truly the cause of the disease. With the general practitioner, the case is far different. Accustomed daily to examine a variety of diseased conditions, with their pathological changes seated in different parts of the body, and of a nature the one directly opposite to the other, his comprehension becomes broader day by day, and he is now prepared and ready to give due importance to symptoms that might be overlooked by the specialist, always eagerly looking for symptoms referable to the domain of his favorite study. Therefore, it would be well if a person in poor health would first consult some general practitioner. If, after a careful examination, this doctor discovers the original seat of the disease to be located in the eye, the ear, or the nervous system, he should recommend a consultation with some competent specialist in whichever branch the disease belongs. The examination should be made by this gentleman, and in a subsequent consultation between the specialist and the regular attendant, the plan of treatment should be mapped out, to be carried into effect by the latter. Examinations and consultations should take place as often as considered necessary. In the meantime the general practitioner is prepared and competent to treat any general complications that may arise in the course of the local disease. Or, suppose the disease is made out to be purely a local one, without any constitutional trouble whatever, then might the general practitioner hand the patient over absolutely to the specialist, for relief. The principal objection which the profession see in

specialists, and the greatest evils resulting from the present system, is due to the fact that, as a class (there are some noted exceptions), they resort to judicious but extensive personal advertising, by which means they secure many patients not afflicted with any of that class of diseases of which they have made a special study, but suffering from a general diseased condition, which properly comes under the domain of general medicine, and which they are incompetent to intelligently treat; thus bringing odium and disrepute upon the profession and its members at large. By resorting to the measure recommended by the *Lancet's* correspondent, specialism would be recognized as a valuable branch of medical science, and that class of practitioners would be regarded by the general physician as very valuable aids in the treatment of disease.

THE DANGER OF ADMINISTERING ANÆSTHETICS WITHOUT WITNESSES.

This subject has been written upon time and again, and physicians have been repeatedly warned not to give an anæsthetic to any one, but in an especial manner to avoid using them with females, unless in the presence of witnesses. Yet the advice is unheeded, and every now and then we hear of some unfortunate results from this negligence. This time it comes from the West. An old and prominent physician was visited by a beautiful young lady, for treatment for some sexual disorder. The lady belonged to the blue blood of the city, while the physician had been her grandparents' attendant, and had for years been the family physician. On one of her visits he informed her that an operation was necessary, and induced her to take some anæsthetic. Subsequently, not improving, she consulted another physician, who told her that she was pregnant. In due time a child was born.

The lady made no effort at concealment, but in a short time brought an action for damages against her old doctor. He publicly denied the charge, but refused to go into court and do so under oath. After a few minutes' deliberation only, the jury brought in a verdict against the doctor, assessing the damages at fifty thousand dollars. The verdict was received with such open manifestations of approval from the judge, as well as the audience, the former publicly shaking hands and congratulating the young lady in court, as to leave no doubt of the sympathy of the public. The case is a sad one; whether guilty or not, this old and established physician has been ruined, socially and professionally, forever.

It should be made a rule, never to be broken, by every physician, when he commences the practice of medicine, to refuse absolutely to administer an anæsthetic to any woman alone, no matter what the collateral circumstances may happen to be.

Women are peculiar and unreliable, and there is no accounting for the queer notions they may sometimes get into their heads; so that no physician is surely safe from trouble who has passed a period alone with a woman who has been made unconscious by an agent administered to her by him.

Notes and Comments.

The Working Zone of Anæsthetics.

From the London *Medical Record* we note the following valuable conclusions arrived at by M. Paul Bert, the French Minister of Public Instruction, communicated by him to the Paris Academy of Sciences. His experiments were conducted on dogs, mice, and sparrows, who were kept in chambers containing air along with various proportions of some anæsthetic. In a graduated series of such mixtures of increasing strength, one is found just sufficient to cause insensibility, and proceeding higher, a dose is reached which kills. The interval between these points he calls the working zone. In the cases of chloroform, ether, amylene, bromide of ethyl, and chloride of ethyl, he found the fatal dose to be precisely double the anæsthetic dose. When an animal is made to breathe, in the way indicated, a mixture about the middle of the working zone, it is very quickly anæsthetized, and remains perfectly quiet during the whole experiment (two hours in some cases), not requiring any attention or concern. A very great contrast to the ordinary method by the compress or sponge. M. Bert points out that with the compress, a patient alternately breathes (according

to the amount of chloroform in the compress, or its distance from mouth and nose) a mixture of air and chloroform either below the active dose, within the working zone, or at or beyond the limit of safety. In the case of chloroform, the working zone is very narrow, since while two drachms in twenty-five gallons does not suffice to render a dog insensible, five drachms kills it. While with ether there is an interval of ten drachms between the active and the fatal doses. An anæsthetic acts, not by the quantity respired, but according to its proportion in the inspired air. M. Bert recommends the use of a mask, communicating by a tube with a zinc reservoir holding from fifty to seventy-five gallons of the anæsthetic mixture. The pulse and respiration need no attention. M. Bert's experiments give no guidance to determine the lower limiting dose; this question is still open. The ratio between the limiting doses of protoxide of nitrogen is as one to three.

Acupuncture in Nervous and Spasmodic Affections.

The *Journal des Sciénces Médicales*, for December, contains an interesting article on the above subject, by Dr. Arens, from which we extract as follows:—

The Doctor frankly admits that it was accidentally he at first used acupuncture, but that within the last few months it has given him most excellent results, in a number of local spasmodic affections. His first experience was with a lady, who for four months past had suffered from severe gastralgia, attended by nausea and frequent vomitings; this had finally produced considerable exhaustion. Having been called to her during the night, and finding her in great suffering, all other means having failed, he proposed relief by a hypodermic injection of morphia. He had with him Pravaz' injector, but the morphine solution was missing. It was then he bethought himself of acupuncture, and decided on making two subcutaneous punctures over the epigastrium, using for that purpose capillary trocars, which he left *in situ* for five minutes.

The pain diminished soon after the first puncture, and ten minutes later had entirely disappeared. It has not since then been felt, and the cure is a radical one.

Subsequently, in a case of nervous asthma, the Doctor again had recourse to acupuncture, with satisfactory results. The paroxysms were invariably checked, by simply introducing the trocar of an injector two or three times, under the skin, within a small space, on a line with the internal extremity of the clavicula. On several occasions, not having steel needles at hand, he made use of ordinary pins, and obtained quite as good results. This treatment was successful in over fifty instances. The attacks passed off within ten minutes, and the patient enjoyed quiet rest.

Finally, the Doctor used acupuncture with success in the case of a boy, thirteen years old, troubled with an almost constant nervous cough, lasting from morning till night. Three pins applied, as in the case of the asthma patient, and left in place for half an hour, cured the cough, which has not since then again appeared.

Cases of hysterical cough have likewise been cured, and in some instances, the paroxysms in whooping cough have been greatly relieved. Hence, the Doctor concludes by recommending a more frequent use of acupuncture, and suggesting that it may often advantageously replace hypodermic injection.

Writers' Cramp or Scriveners' Palsy.

Trousseau and other eminent authors have considered this as an incurable affection. The following case, reported by Dr. H. Vigouroux, in *Paris Médical*, Dec. 10th, 1881, will, therefore, be read with interst.

Mr. X, a bookkeeper, noticed that his handwriting was becoming illegible, the pen holder dropped from his fingers, despite his efforts to hold it, and his hand trembled whenever he attempted to write. He consulted several physicians, and followed different treatments, without obtaining any benefit. Finally, he consulted Dr. Vigouroux, who, without any hopes of positive success, advised a trial of the actual cautery. On the 4th of April three rows of five points were applied on the posterior face of the forearm, between the elbow and wrist. On the third day the patient began experiencing relief; pain had disappeared, there was less irritation, and greater ease in holding the pen, but the writing still remained scrawled. Other cauterizations were made on the 11th and 19th of the same month, and a decided improvement was noticeable. The third application was extended over the dorsal face of the hand, to the tip of the little finger, which was the seat of quite a sharp pain, owing to the cramped position in which the hand had to be held while writing. After a fourth application, made on the 3d of May, the handwriting became as perfect as before the cramp set in. To insure complete recovery, three other cauterizations were made, on the 17th of May, 21st of June, and 12th of July; since which the patient has experienced no further trouble whatever.

Iodide of Potassium in Frontal Headache.

The London *Medical Times and Gazette* says:—

Dr. Haley states, in the *Australian Medical Journal* for August, that for some time past he has found minimum doses of iodide of potassium of great service in frontal headache. A heavy, dull headache, situated over the brow, and accompanied by languor, chilliness, and a feeling of general discomfort, with distaste for food, which sometimes approaches to nausea, can be completely removed by a two-grain dose dissolved in half a wineglass of water, and this quietly sipped, the whole quantity being taken in about ten minutes. In many cases the effect of these small doses has been simply wonderful. A person who, a quarter of an hour before, was feeling most miserable and refused all food, wishing only for quietness, would now take a good meal and resume his wonted cheerfulness. The rapidity with which the iodide acts in these cases constitutes its great advantage.

The morbid condition here described is so very common, that we would invite the experience of any gentleman who may see fit to give this remedy a trial.

Medico-Legal Importance of Injuries to the Nails.

The *Journal des Sciénces Méd.* for November, 1881, contains the following:—

In the researches made by Bean on the growth and development of the nails, he studied the semeiological importance of the furrows, or depressions which are observed in a number of diseases, especially in febrile affections, and he called attention to the medico-legal importance which those furrows would have, in a case where the accused might have some interest in concealing the existence of an anterior disease, the date, duration, and details of which could thus be established. The medico-legal value of those suggestions have lately, and for the first time, been put to practical test by Mr. Contagne.

A burglary was committed during the night of October 28th, and owing to various traces, it was evident that the thief had wounded one of his fingers. A month later three men were arrested on suspicion of having done the deed. On examination, Mr. Contagne found that one of these men bore marks on the medius finger of the right hand, of a lesion of the nail, consisting in a scar about midway of the nail, caused, no doubt, by a wound on its external half, which, while serious enough to have interested the connection of that organ with its matrix, had healed without entailing any necessity for a new nail, and after a time, had only left a scar, due to imperfect nutrition. During the examination, the accused evinced great uneasiness, and affirmed that the scar was the result of a wound from a stone, received six months prior. The fallacy of this explanation was, however, evident.

It is known that the average growth of the nails on the index, the medius, and the annular fingers, is four millimeters a month.

At a second examination, made on the 30th of December, the distance between the lower edge of the scar and the lunula was found to measure eight millimeters, consequently, a wound at the base of the nail two months earlier, the date of the burglary, could have caused the scar; in other words, assuming the growth of this man's nails to have been normal, the scar indicated an injury received since, but not prior, to two months.

Three other measurements were made, at monthly intervals, so as to prove beyond a doubt that the man's nails grew in a normal manner, and it became, thereby, possible to overthrow his entire system of defence.

Excessive Development of the Breasts Early in Pregnancy.

The London *Medical Times and Gazette* records a case of this kind offered to the Surgical Society of Paris, by M. Monod, in which the breasts had acquired an enormous size by the fourth month of pregnancy. In two former pregnancies, in the same patient, a similar trouble had occurred, and in the second instance large quantities of milk were discharged. In the present case, this unusual development had occurred as early as the second month, and the woman was becoming very thin. The former pregnancies had terminated favorably. The question then arose, as to whether suction or the induction of premature labor was indicated. In view of the fact that suction would have the effect of increasing the secretion of milk, the weight of opinion was in favor of inducing premature labor, if the patient's health should become impaired.

Filaria Medinensis.

At a recent meeting of the Pathological Society of London (*Medical Times and Gazette*), Dr. Finlay exhibited specimens of filaria medinensis for Dr. Mackellar, of Glasgow, who holds that the local irritation caused by these worms is not set up by the death of the parent worm, but by the presence in the tissues of the young, escaped from the broken pieces of the adult female.

Ptyalism in Insanity Treated by Neutral Sulphate of Atropine.

In the *Paris Méd.*, Dec. 3d, 1881, we find a report of Dr. Daujat's therapeutic experiments with neutral sulphate of atropine, administered in the following way:—

℞. Neut. sulph. atropine, 30 cm.=gr. ivss.
Distilled water, 300 gm.=f℥ ixss.

That is 1 milligram to each gram of solution.

The following are his conclusions:—

1. Neutral sulphate of atropine is certainly very efficient in the treatment of ptyalism among the insane.

2. When it does not entirely cure salivation, it greatly reduces it, and on reappearance it never reaches its original intensity.

3. The cure of sialorrhœa usually requires a treatment lasting about three weeks, and the administration of the neutral sulphate of atropine in daily doses of from $\frac{1}{60}$ to $\frac{1}{20}$ of a grain, progressively increased.

4. The length of time required for treatment depends more upon the time sialorrhœa has existed, than on its abundance.

5. Sulphate of atropine agrees fairly well with insane patients, and its best effects have been obtained in cases complicated with broncorrhœa and epilepsy.

The Treatment of Gunshot Wounds of the Abdomen in Relation to Modern Peritoneal Surgery.

Dr. J. Marion Sims delivered an address on this subject which has been published in the *British Medical Journal*, from which we note the following salient points:—

The principles essential to success which must guide us in all operative treatment of abdominal wounds are—

1. All hemorrhages must be promptly controlled by pressure, ligature, or hæmostatic forceps.

2. The peritoneal cavity must be thoroughly cleaned after operation and before the abdominal incision is closed.

3. The abdominal incision, usually in the middle line, must be properly closed. The divided edges of the peritoneum should be included in the sutures that close the abdominal wound, for if they are not, their raw edges may become adherent to the intestine in such a manner as to cause obstruction to the bowel, when a fatal result may follow. Commenting on the drainage tube, he advocates its use, but cautions us against the danger of ventral hernia from its employment, and recognizes the necessity of discovering some method of avoiding this serious accident.

Sucrate of Lime Liniment for Burns.

In the *Concours Médical* we see that in place of the ordinary lime water and oil liniment, M. Constantin Paul recommends one made from sucrate of lime, according to the following formula: Slacked lime and sugar, in equal quantities, are triturated together. Water enough is then gradually added, until the mixture becomes very liquid. It is allowed to stand for forty eight hours, and then filtered. The solution is evaporated to the consistency of a thin syrup, and this is mixed in equal parts with a solution consisting of one part of glycerine and three parts of oil. This liniment has the advantage of containing a larger proportion of lime in a given quantity. It is applied to burns and covered over with raw cotton.

Testing for Lead in Articles of Food.

We read in the *Concours Méd. No.* 47, of a new process by Dr. G. Ponchet, for the detection of lead in articles of food. The suspected article is treated with its own weight of fuming nitric acid, to which 22 per cent. of acid sulphate of potash is added. When the effervescence is over, an excess of sulphuric acid is added, so as to destroy all of the organic matter, and the whole mass is heated until entirely discolored. Water is then added, and without filtration all of the acid liquid is submitted to the action of four Bunsen elements. All the lead which is present collects on the platinum blade of the negative electrode. From this it is redissolved by nitric acid, again precipitated, and weighed in the form of sulphate.

Adulterated Opium.

The *Sanitary Engineer* calls attention to the fact that the higher grades of opium, rich in morphia, are adulterated or mixed with foreign substances, so as to bring the percentage of morphia down to a uniform standard. For this purpose powdered liquorice root has been used. The propriety of this dilution is then discussed, and the very pertinent question asked, "if proper, why is the dilution not openly admitted or stated on the label?" Whether justifiable legally, or not, it is morally wrong, and ought not to be tolerated. There is one effectual way of stopping it. Every physician should examine the quality of the opium used by the druggist to whom he sends prescriptions, and if found to be adulterated, request him to procure the pure article, or, as an alternative, if the druggist fails to do so, send his business to some one who will.

The Microbi of Blennorrhagic Pus.

The *Journal des Sciénces Médicales*, for November, 1881, states that these microbi have already been noticed, but that Mr. Weiss contributes additional interesting data on the subject. The pus examined was taken from both men and women, and all necessary precautions observed. In every case, under the microscope, in the midst of the pus globules and epithelial elements small bodies could be seen, either alone, or united in pairs, or forming more numerous groups, and arranged after a special manner. These corpuscles always have a characteristic appearance. Mr. Weiss examined pus from thirty-two patients, and in each case he found similar parasitical forms. As a check, he examined pus from simple urethritis, balanopostitis, soft and syphilitic chancres, buboes and leucorrhœa, but in no case could he discover the special elements which he considers characteristic of blennorrhagia. Experiments for the purpose of propagation would now be interesting; but they have not, as yet, been undertaken. As regards treatment, Mr. Weiss particularly recommends the parasiticidal qualities of hypermanganate of potassium. In Dr. Spillman's service, in all cases of vaginal blennorrhagia treated by injections with a solution of this salt, in the proportion of 0.25 centigram to the thousand, a rapid and extensive decrease in the number of microbi was noticed; they were found to have lost their coating and to have suffered changes indicating that they had been altered or destroyed by the application of this substance.

Vowels and Consonants.

The physiology of the voice has equal interest for laryngologists and linguists. One of the former, Dr. C. Seiler, of this city, has sent us a reprint from the *Archives of Laryngology*, in which he attacks the definition of vowels and consonants as generally accepted. He claims that the vowels and consonants are not pronounced separately, and that both are essentially vocal, differing from each other only by variations of timbre.

There are grave difficulties in accepting this view. The essential difference between vowels and consonants is not a device of grammarians, as Dr. Seiler says (page 2), but rests on a physiological distinction. The quality of the vowel depends on the length of the vocal tube through which the air is propelled; whereas, a consonant arises from narrowing or closing the tube in some part of its course. There are consonant sounds which have nothing vocalic in them; as, for example, the "explosives" of Central America, the "clucks," of the Selish, and the "inspirates," of the Hottentots.

The consonants are the fixed and voluntary parts of speech; while the vowel sounds are variable and involuntary, as we notice in the cries of pain or joy, the wailing of babes, and the sounds of lower animals and unconscious natural objects.

Fatal Peritonitis from a Vaginal Injection of Acetate of Lead.

The following case, reported in *Paris Médical*, *No.* 49, seems to be in favor of the now generally contested possibility that a fluid injected in the vagina may find its way into the abdominal cavity, through the Fallopian tubes.

A woman, 22 years old, was suffering from a severe attack of leucorrhœa. Injections of acetate of lead were prescribed, and these were continued for ten days, with good results. On the eleventh day the injection was taken rather hastily, owing to some interruption, and immediately after the woman complained of violent pains in the abdomen; she became deathly pale and fainted. Dr. Baum, the attending physician, was called in, and diagnosed acute peritonitis, from which the patient died, seventy-two hours after. The autopsy showed that, besides the ordinary lesions of peritonitis, a precipitate of sulphate of lead had been formed on the entire serous surface of the large intestine and across the whole hypogastrium, even as high as the umbilicus. This precipitate had the appearance of small, grayish-black, round peas, which, in some places. were very thickly distributed, while in others only a few could be seen.

Blennorrhagia Treated by Chlorate of Potash.

The *Paris Médical*, Dec. 3d, 1881, reports that Zeitlin has treated fourteen cases of blennorhagia with chlorate of potash, administered internally, in daily doses of three grams (grs. xl) according to Dachman's method. The results have always been satisfactory. After a few days micturition becomes painless, erections cease, and the discharge is less abundant, and more serous.

The happy effects of this salt are due to the rapidity with which it is excreted by the kidneys, without any change in its composition, and to its local action on the urethral mucous membrane.

Good results have also been obtained with chlorate of potash, prescribed as an injection, and in cases of blennorrhagic or other cystitis its internal use has been found beneficial.

On the Use of Iodoform Spray.

In the *Journal des Sciences Méd.* for December, 1881, M. Dujardin-Beaumetz recommends a new method for the use of iodoform in the case of syphilitic ulcerations, or those attending vaginitis. By means of the spray, he applies, on the affected parts, a solution of iodoform in ether, of which the following is the formula:—

℞. Iodoform,	gr. xv	
Ether sulph.,	℥ iij.	M.

The spray supplies a regular tenuous deposit of iodoform which reaches every fissure. In this way it is possible to reach those deep ulcerations of the throat which are otherwise so difficult to get at. The cure of vaginitis is explained by the effects of iodoform on the little ulcerations of the vulva, which are almost always a determining cause in all painful contractions of the ring. Hence, iodoform is of no service in any form of vaginitis, other than that due to ulcerations or fissures. The author has made no experiments with his process on anal fissures, for which he still believes that dilatation is indicated, but he advises its use in the treatment of vaginitis.

Uterine Colic Caused by the Entrance of a Leech into the Uterus.

In the *Rocky Mountain Medical Times*, Dr. S. Cole reports a curious case. He desired to apply leeches to the cervix uteri. After plugging with cotton the canal of the cervix, he put two leeches into the speculum. They failed to take hold, and after working with them for half an hour, he plugged the vagina with cotton, hoping thereby to hold them in position and thus induce them to bite. Very soon the woman was seized with severe uterine colic. Upon removing the cotton from the vagina he found only one leech. The plugging had fallen out of the cervix and leech number two had crawled into the womb. A uterine probe passed into the womb made the leech so uncomfortable that he soon appeared at the os and crawled slowly out. Had this procedure been unsuccessful, he would have resorted to an intra-uterine injection of warm salt water, salt being very repulsive to leeches.

Warm Ox Blood in Phthisis.

Dr. Bernard, in the *Journal de Thérapeutique*, recommends this rather disgusting remedy as of benefit in the early stages of tuberculosis. The *modus faciendi* is very simple: Every morning the patient goes to a slaughter house and drinks, on an empty stomach, a glassful of freshly-drawn warm ox blood. After a few days, if no vomiting takes place, the dose is increased to two glassfuls. This treatment must be followed to the exclusion of all others, for at least a year. The benefits which have invariably attended it, and which soon show themselves, are regularity of the bowels, relief from coughing, and a return of appetite.

A Dyspeptic Nurse.

Speaking of the character of the attendants of a sick person, Dr. J. Milner Fothergill says: "A pious widow, with dyspepsia and strong religious convictions, is a ghoul when illness is about. She sucks the life out of an invalid, like a moral vampire. As life ebbs she is sustained, and when the invalid has passed the portals of another world she goes away edified, strengthened and encouraged in her murderous mission, fully prepared to extinguish the lives of any number of relatives if ill luck should prostrate them upon the sick bed."

Locomotor Ataxy following Smallpox.

At a meeting of the Harveian Society of London (reported in the *British Medical Journal*), Dr. C. G. Henderson reported a case of confluent smallpox followed by ataxy. He also referred to similar cases recorded by Landouzy and others, and considered that the lesions causing the patient's symptoms were, probably, analogous to those found in diphtheritic palsy and other forms of paralysis noted after acute diseases. The prognosis is favorable in such cases, since, in the majority of instances, it terminates in recovery.

Correspondence.

Venesection in Pneumonia.

Ed. Med. and Surg. Reporter:—

I confess to having allowed my lancet to get rusty, in company with the great majority of my professional brethren. Recently, I visited Robert B., aged twenty, a strong, vigorous youth, ill with pneumonia, and for two days in succession I prescribed the usual remedies, internally and externally. On my *third* visit I found the affected lung, the right, in such a state of engorgement, and the symptoms of oppression of the circulation so alarming, that I tied up the young man's arm and drew fourteen ounces of blood. The pulse came down, the duskiness of the face disappeared, the breathing became easier, and in forty-eight hours my patient was surely (and rapidly) convalescent, making the duration of the active stage, with two days lost in the beginning, before bleeding was resorted to, less than six days. Comment is needless. I want to thank Dr. Corson, for his articles on this subject rang in my ears during those *two* days.

Preston, Maryland. H. F. Willis, M.D.

News and Miscellany.

New York State Medical Society—Seventy-sixth Annual Meeting.

The Society met in annual session, at Albany, in Agricultural Hall, on Tuesday, February 7th, The meeting was called to order at 10 o'clock. by the president, Dr. A. Jacobi, of New York City, and the exercises were opened with prayer by the Rt. Rev. Bishop Doane.

The President then delivered his inaugural address. He said—

Mr. Vice-President, Members and Delegates: "The third quarter of our first century is just closing. The history of these seventy-five years is of vast importance. At the time when this Society was founded, Bichat first thought of establishing, on a sound basis, a pathology of the tissues. Those times were still the periods of systems and schools; ours has succeeded in establishing scientific medicine on the sound foundation of close observation of the histological elements, and of experiment. In all of the eighteenth century, it was not the professors, but the practitioners who improved medical science. It is a glorious fact in the history of the profession at large, that almost no year has elapsed without the discussion of proper measures for the advancement of medical education. This fact is in accordance with all our republican habits and institutions which stimulate the masses into action in behalf of the general good. In the interest of both the public and the profession, medical education ought to be of the most advanced kind, and the license to practice ought not to be easily obtained.

Perhaps it cannot be proven that any medical schools ever opposed the establishment of a State Board of Examination, which alone might be authorized to convey the license to *practice*, the right of the college to convey diplomas notwithstanding. If it ever did, it is not probable that any college would now oppose any such movement, which I hope will be set on foot and result in the Legislature passing a proper law.

It is claimed by many that a coöperation with the homœopaths, for the purpose of arranging State examinations would not be out of place at the present time. It is generally asserted by many that there are good reasons for abolishing the boundaries between the several classes of medical men altogether. The homœopaths claim that they do not differ from us any longer, do not mean to differ from us, as formerly they did, and proudly claimed to do. If we have reason to believe that medical science is one and indivisible, and based on logic and experimentation, we may overlook differences and meet with a spirit of reconciliation those who do not encounter us any more, so they say themselves, with the dicta of a school or a sect, but who claim that each individual man among them stands on his own feet, and does his own thinking. A crowd of men facing the profession with the cry of "*similia similibilus*," and "no quarter," exclude themselves, and cannot expect kind treatment at our hands. Besides, we are not the only class of what the State calls "lawfully qualified practitioners." It is necessary that in many steps to be taken before the legislature, we should be in full concord with those who share with us the honor of being called lawful practitioners. I will abide by whatever decision may be rendered the Committee on Revision of the Code of Ethics."

Referring to hygiene, the president said: "I have a word to say in regard to some contagious diseases. It is certain that both scarlatina and diphtheria are contagious, and it is also certain that this contagion extends over the whole period of the disease, and is enhanced by the accumulation of the poison produced by the accumulation of cases. It is also certain that diphtheria will infest all the surroundings of some patients, who will not get well unless removed from them. It is certain that isolation is of paramount importance in these diseases. I hope that a motion will prevail, to suggest the necessity of establishing hospitals for the treatment of diphtheria and scarlet fever within the limits of the large cities. Their proximity need be no source of danger. In conclusion, Dr. Jacobi directed the attention of the Society to the '*danger to life and limb of factory children.*' He recommended that children employed in factories should be under official supervision. They should be examined physically before being allowed to work. No night or Sunday work should be permitted. They should not be allowed to work before the age of puberty."

As an appropriate termination to his able address, the president said: "Twenty-eight years ago, a young refugee from a European State prison set foot on the hospitable shores of this continent. The homeless wanderer is to-day the proudest of your number, for a year ago this week you elected him to the most honorable and honored position the profession of this great State can fill, the first foreign-born president of this Society, so far as I know. I know there is no national profession with the same spirit of hospitality to both new men and new ideas; the same impartiality and absence of territorial narrow mindedness, which is prevalent among the medical citizens of the United States. May that spirit remain intact and chaste for the fourth quarter of this century, and for centuries to come, in the life of the Medical Society of the State of New York." After the reading of the president's address the usual committees were appointed, and general preliminary business transacted.

The first paper read was by Dr. F. R. Sturgis, on "Hints and Thoughts on Medical Education." The essential points of this address were that medical education in this country is inferior, because nearly all the medical schools are private business enterprises, and must be conducted to pay running expenses, if nothing more; therefore, bait must be set to lure money from the pockets of would-be physicians; and the suggestion that every professor be paid a salary sufficiently large to enable him to devote his time exclusively to teaching and keeping abreast of the times. (This course has been adopted by the University of Pennsylvania, under the management of Provost Pepper.—Ed.) Dr. Sturgis quoted from President Elliott, of Harvard, "That the University should be more concerned to have a very *good* school of medicine than a very *large* one."

After discussion, the second paper, on "De-

fective Construction of Thermometers," was read, by Dr. E. R. Squibb. Papers were also read by title, as follows: "Obituaries of Dr. Levant B. Cotes, by Dr. William Warren Potter, of Buffalo; and of Dr. John F. Whitbeck, by Dr. H. H. Langworthy, of Rochester."

The next paper was by Dr. W. S. Ely, of Rochester, entitled, "Note on Beef Juice."

At the afternoon session, Dr. S. O. Van der Poel read a paper on "The Present Condition of the Tuberculosis Question." Dr. W. W. Potter, on "Genu-Pectoral Posture in Retro-Displacements of the Uterus and Prolapsus of the Ovaries." Dr. E. M. Moore, of Rochester, gave a verbal "Report of a Case of Extraordinary Bone Development." Dr. E. E. Seguin, of New York, read a paper on "Effectual Dosage of Certain Remedies in the Treatment of Nervous Diseases." Dr. Charles S. Bull, of New York, on "Syphilitic Diseases of the Lachrymal Apparatus," and Dr. L. E. Felton gave a verbal description of a new galvanic battery, of his invention. The meeting then adjourned.

At the evening session, the committee appointed to revise the code of ethics made the following report:—

Code of Medical Ethics.

I. *The Relations of Physicians to the Public.*
II. *Rules Governing Consultations.*
III. *The Relations of Physicians to Each Other.*

I. THE RELATIONS OF PHYSICIANS TO THE PUBLIC.

It is derogatory to the dignity and interests of the profession for physicians to resort to public advertisements, private cards, or handbills, inviting the attention of individuals affected with particular diseases, publicly offering advice and medicine to the poor without charge, or promising radical cures; or to publish cases or operations in the daily prints, or to suffer such publications to be made; or through the medium of reporters or interviewers, or otherwise, to permit their opinions on medical and surgical questions to appear in the newspapers; to invite laymen to be present at operations; to boast of cures and remedies; to adduce certificates of skill and success, or to perform other similar acts.

It is equally derogatory to professional character, and opposed to the interest of the profession, for a physician to hold a patent for any surgical instrument or medicine, or to prescribe a secret nostrum, whether the invention, or discovery, or exclusive property, of himself or of others.

It is also reprehensible for physicians to give certificates attesting the efficacy of patent medical or surgical appliances, or of patented, copyrighted, or secret medicines, or of proprietary drugs, medicines, wines, mineral waters, health resorts, etc.

II. RULES GOVERNING CONSULTATIONS.

Members of the Medical Society of the State of New York, and the medical societies in affiliation therewith, may meet in consultation legally qualified practitioners of medicine. Emergencies may occur in which all restrictions should, in the judgment of the practitioner, yield to the demands of humanity.

The following rules should be observed in conducting consultations:—

The examination of the patient by the consulting physician should be made in the presence of the attending physician, and during such examination no discussion should take place, nor any remarks as to diagnosis or treatment be made. When the examination is completed, the physicians should retire to a room by themselves, and after a statement, by the attending physician, of the history of the case and of his views of its diagnosis and treatment, each of the consulting physicians, beginning with the youngest, should deliver his opinion. If they arrive at an agreement, it will be the duty of the attending physician to announce the result to the patient, or to some responsible member of the family, and to carry out the plan of treatment agreed upon.

If in the consultation there is found to be an essential difference of opinion, as to the diagnosis or treatment, the case should be presented to the patient, or some responsible member of the family, as plainly and intelligently as possible, to make such choice or pursue such course as may be thought best.

In case of acute, dangerous or obscure illness, the consulting physician should continue his visits at such intervals as may be deemed necessary by the patient or his friends, by him, or by the attending physician.

The utmost punctuality should be observed in the visits of physicians when they are to hold consultations; but as professional engagements may interfere or delay one of the parties, the physician who first arrives should wait for his associate a reasonable period, after which the consultation should be considered postponed to a new appointment. If it be the attending physician who is present, he will, of course, see the patient and prescribe; but if it be the consulting physician, he should retire, except in an emergency, or when he has been called from a considerable distance, in which latter case he may examine the patient, and give his opinion in writing, and under seal, to be delivered to his associate.

III. THE RELATIONS OF PHYSICIANS TO EACH OTHER.

All practitioners of medicine, their wives, and their children while under paternal care, are entitled to the gratuitous services of any one or more of the faculty residing near them, whose assistance may be desired.

Gratuitous attendance cannot, however, be expected from physicians called from a distance, nor need it be deemed obligatory when opposed by both the circumstances and the preferences of the patient.

The affairs of life, the pursuit of health and the various accidents and contingencies, to which a medical man is peculiarly exposed may require him temporarily to withdraw from his duties to his patients, and to request some of his professional brethren to officiate for him. Compliance with this request is an act of courtesy which should always be performed with the utmost consideration for the interests and character of the family physician, and when exercised for a short period, all the pecuniary obligations for such service should be awarded to him. But if a member of the profession neglect his business in quest of

pleasure and amusement, he cannot be considered as entitled to the advantages of the frequent and long-continued exercise o the fraternal courtesy without awarding to the physician who officiates the fees arising from the discharge of his professional duties.

In obstetrical and important surgical cases, which give rise to unusual fatigue, anxiety and responsibility, it is just that the fees accruing therefrom should be awarded to the physician whoofficiates.

Diversity of opinionand opposition of interest may, in the medical as in other professions, occasion controversy and even contention. Whenever such cases unfortunately occur, and cannot be immediately terminated, they should be referred to the arbitration of a sufficient number of physicians before appealing to a medical society or the law for settlement.

If medical controversies are brought before the public in newspapers or pamphlets, by contending medical writers, and give rise to or contain assertions or insinuations injurious to the personal character or professional qualifications of the parties, the effect is to lower, in the estimation of the public, not only the parties directly involved, but also the medical profession as a whole. Such publications should, therefore, be brought to the notice of the county societies having jurisdiction, and discipline inflicted, as the case may seem to require.

Wm. C. Wey, M.D., *Chairman.*
C. R. Agnew, M.D.,
S. Oakley Vander Poel, M.D ,
Wm. S. Ely, M.D.,
Henry G. Piffard, M.D., *Secretary.*

The discussion which followed the reading of the report was long and animated, and participated in by Drs. Roosa, Van der Poel, Piffard Sturgis, Agnew, and Noyes, of New York city; Hutchinson, of Utica; Ely, of Rochester; Mosher, of Albany; Wey, of Elmira; Squibb, of Brooklyn.

The president delivered his annual address in the Assembly Chamber of the New Capitol. He hose for the subject, "Infant Feeding and Infant Foods." From forty to fifty-three per cent. of the infants that die perish from diseases of the digestive organs. During the first two months of an infant's life, the mother who will refuse breast milk, except from sickness, is an accomplice in the death of her child, should such an event follow.

The common fault of breast milk is an undue percentage of fat, cheese, salt, etc., due to the condition of the blood. Where cow's milk is used the animal should be so fed as to reduce the proportion of fat.

The speaker then described the institutions at Stuttgart and Frankfort-on-the-Main, where cow's milk is prepared for infant food. Among the board of directors are a veterinary surgeon and a chemist. No cows are used except between the ages of three and eight years. The stables are well ventilated, the floors of the stalls cemented and connected by drains with the city sewers. Dry food is used, consisting of certain and stated proportions of such fodder as have proved the best. The stables are situated near the city, so that the milk will not suffer by transportation, and it is delivered in tightly corked bottles. The milk of a special cow is not given to a special baby, but all is mixed together. The speaker then denounced many of the so-called "infants' food," and pointed out wherein they were deficient.

At the conclusion of the address, a vote of thanks, moved by Dr. S. O. Van der Poel, was unanimously carried.

The annual banquet then took place at the Delavan House. The following toasts were proposed and responded to —

"The Clergy," Rev. Wesley R. Davis; "The Law," Mr. J. Irving Browne; "The Press," Mr. St. Clair McKelway; "The Medical Society of the State of New York," Dr. William Govan; "The ex-Presidents," Dr. S. O. Van der Poel; "The Business Committee," Dr. D. B. St. John Roosa; "The State Board of Health," Dr. Elisha Harris; "The Undertaker," Gen. Chas. Hughes; "The evening of February 8th, 1882," Dr. Frazier; "The Medical Expert," Dr. John P. Gray.

Second Day's Proceedings.

WEDNESDAY, FEBRUARY 8TH.

Society called to order at 10 A.M. Prayer by Rev. Dr. Davis. Dr. Porter reported, as Trustee of the Merritt H. Cash Prize Fund, that there was available for a prize $127. Dr. E. V. Stoddard made a verbal report for the Committee on Hygiene. Dr. Squibb moved the appropriation of $100 for the necessary expenses of the Committee on Experimental Medicine. Motion carried. Dr. Daniel Lewis, of New York, read a paper on "The Treatment of Scarlatina," speaking highly of digitalis. Dr. Lorenzo Hale, of Albany, gave "An Improved Dressing for Fractured Clavicle." Dr. H. Knapp, of New York, read a paper on "Croup of Conjunctiva," with remarks on contagious forms of conjunctival inflammation. Dr. John O. Roe, of Rochester, read a paper on "Internal Œsophagotomy."

AFTERNOON SESSION.

Dr. L. Elsberg read a paper on "The Laryngeal Muscles of the Voice, and the Laryngoscopic Images of their Paralysis." Dr. Wm. Hales on "Improved Methods in Laboratory Construction." A biographical sketch of Dr. S. Beebe was read by title. Dr. Austin Flint read a paper on "Hepatic Flatness on Percussion, as Proof against Intestinal or Gastric Perforation in Cases of Acute Peritonitis." A paper on "Treatment of Double Talipes Varo-Equinis by Open Incision," was presented by Dr. A. M. Phelps, of Chatauquay.

Dr. George H. Fox, of New York, read a paper on "The Treatment of Wine Mark by Electrolysis." The object arrived at is to excite sufficient inflammation to destroy the fine network of capillaries. He uses a small brass disk, which carries numerous fine cambric needles, and is attached to the negative cord of a constant battery; they are quickly pressed into the skin and allowed to remain from ten to thirty seconds. The effect of the electrolysis becomes evident in about three weeks. There are some dangers to be apprehended, but generally the operation produces marked improvement.

A case of "Subcutaneous Section of the Femur" was reported by Dr. A. Van Derveer. The operation performed for the relief of anchylosis was quite successful. Dr. H. D. Noyes read a paper on "Division of Optic and Ciliary Nerves for Sympathetic Ophthalmia."

A memoir of Dr. James P. White, of Buffalo, was presented by Dr. Austin Flint, of New York, and Dr. L. Duncan Bulkley read a paper on "The Malignity of Syphilis," with an analysis of 450 cases. After which the Society adjourned until Thursday, February 9th, at 10 A.M.

Third Day.

The Society convened at 10 A.M., and the services were opened with prayer by the Rev. Mr. Ecob.

The following papers were read, by title or otherwise:—

"Application, by Insufflation, of Medicated Powders to the Upper Air Passages, for the Relief of Catarrhal Conditions." "Inflammation of the Shoulder Joint, resulting from Hemiplegia." "Report of a Case of Molluscum Fibrosum." "The Early Diagnosis of Pott's Disease." "The Significance of Pain Referred to the Ear." "On the use of Avena Sativa." "Cases of Glaucoma, in which iridectomy of one eye seemed to precipitate an attack of Acute Glaucoma in the other eye." "A few Original Thoughts on Cholera." "Facial Paralysis Occurring in Connection with Aural Diseases."

The recommendation of the committee relative to the appointment of a State Board of Examiners by the Regents of the University was adopted.

The following officers were then chosen for the ensuing year:—

President—Dr. Harvey Jewett, of Ontario.

Vice-President—Dr. E. D. Ferguson, of Rensselaer.

Treasurer—Dr. Charles H. Porter, of Albany.

Censors—S. D., J. W. S. Gouley, C. R. Agnew, Austin Flint, of New York: E. D., C. E. Nichols, M. H. Burton, W. S. Cooper, of Troy; M. D., Alonzo Churchill, S. G. Wolcott, J. K. Chamberlayne, of Utica; W. D., C. C. Wyckoff, Thos. F. Rochester, of Buffalo, and Henry Lapp, of Clarence.

Committee of Arrangements—Drs. S. B. Ward, W. S. Ely and J. S. Mosher, of Albany.

Committee on By-Laws—Drs. W. C. Way, of Elmira; Alex. Hutchins, of Brooklyn, and Wm. Manlius Smith, of Manlius.

Committee on Hygiene—Drs. E. V. Stoddard, Rochester; Stephen Smith, New York; Jacob S. Mosher, Albany; J. Foster Jenkins, Yonkers; Caleb Green, Homer; Edward Hutchinson, Utica, and Theodore Dimon, Albany.

Committe on Legislation—Drs. Wm. H. Bailey and C. Van Derveer, Albany, and F. R. Sturgis, of New York.

Committee on Medical Ethics—Drs. R. C. Agnew, New York; E. M. Moore, Rochester, and S. O. Van der Poel, of New York.

Committee on Prize Essays—Drs. Thomas F. Rochester, Buffalo; W. S. Ely, Rochester, and W. W. Potter, of Buffalo.

Committee on Publication—Drs. Wm. Manlius Smith, Manlius; Charles H. Porter, Albany; H. D. Didama, Syracuse, and J. Foster Jenkins, of Yonkers.

Censor of College of Medicine, Syracuse University, John W. Whitbeck.

Drs. Charles N. Hewett, Red Wing, Minn.; Roberts Bartholow, Philadelphia, and Sidney Ringer, London, were elected honorary members.

Drs. Theodore G. Wormley and William Goodell, of Philadelphia, were declared eligible to honorary membership.

The following gentlemen were appointed delegates to the State Medical Societies:—

New Jersey: N. C. Husted, Westchester; Wm. Govan, Stony Point, and Jas. C. Hutchinson, of Troy. Massachusetts: G. G. Monson, St. Lawrence; E. N. Brush, Onedia, and Peter V. S. Pruyn, of Columbia. Ohio: Thos. R. Pooley, of New York. Pennsylvania: H. C. May, Steuben; S. Van Etten, Orange, and J. W. Moore, of Albany. Vermont: Lyman Barton, Essex, and A. M. Phelps, of Franklin. New Hampshire: Wm. M. Chamberlain.

Delegates to Canadian Medical Association—Drs. John Guerin, Cayuga; D. V. O'Leary, Albany; L. E. Felton, St. Lawrence, and C. C. Dodge, of Clinton.

The following delegates were named to the American Medical Association:—

Drs. W. C. Wey, Elmira; C. R. Agnew, H. G. Piffard, S. O. Van der Poel, D. B. St. John Roosa, F. R. Sturgis, Daniel Lewis, A. Jacobi, F. H. Hamilton, Fordyce Barker, L. A. Sayre, Wm. M. Chamberlain, L. D. Bulkley, A. V. B. Lockrow, New York; W. S. Ely, B. M. Moore, Rochester; W. H. Bailey, Albany; E. S. Howe, Clinton; Harvey Jewett, Canandaigua; John P. Gray, Utica; T. B. Reynolds, Saratoga; N. C. Husted, Tarrytown; Geo. J. Fisher, Sing Sing; J. Foster Jenkins, Yonkers; Thos. F. Rochester, Buffalo; Fred. Hyde, Cortland; G. H. B. Spencer, Watertown; J. C. Hutchinson, E. R. Squibb, Brooklyn; Morris Perkins, Schenectady; Theodore Dimon, Auburn; and J. H. Chittenden, Binghamton.

President Jacobi then returned his thanks for the consideration with which he had been treated during his official career, and after a vote of thanks to the various committees, the Society adjourned *sine die*.

In conclusion, we would acknowledge our obligations to *The Medical Annals*, which was published daily, for much of the above report.

Baron Larry.

On the evening of February 6th, Professor D. Hayes Agnew delivered an address on the life and labors of this distinguished surgeon, before the Philadelphia Academy of Surgery. Jean Dominique Larry was born at Beaudeau, near the upper Pyrenees, July 12th, 1766. He was the author of the flying ambulance system during the Napoleonic wars, and the inventor of the lancet-pointed needle. In conclusion, Dr. Agnew said "Larry, as an operator, was judicious, but bold and rapid, and full of gentleness and sympathy. He was to surgery what Napoleon was to the army, the first and greatest." The lecture showed great historical research, and was a most interesting sketch of the life of one of the greatest of surgeons.

An Old Hospital.

The *Sanitary Engineer*, gives the following description of an old hospital on the Island of Malta. which illustrates very accurately the limited knowledge of architectural hygiene which obtained three hundred years ago. The site is the lowest on that side of the town, and all the ground falls towards it. The drains of the town were discharged into the sea, close to the building. Facing the sea, the hospital was exposed to the Sirocco, while it was protected from the healthy north and northwestern winds by the Fort of St. Elmo. The windows in the wards were very small and high, and all along their seaward side were ranged niches, which were used as latrines. Nearly 140 years later several new buildings were so erected as to shut out still more air and light from the original hospital.

Another Death from Supposed Hydrophobia.

Some time since a young lad was accidentally bitten in the finger by a pet dog. The wound was cauterized, and no more thought of it by his family. A month subsequently the boy complained of pain in the hand and forearm of the side that had been bitten. He was taken to a regular physician, and subsequently to an herb doctor. Finally, he was seized with convulsions and died. He was of an exceedingly nervous temperament, and had brooded over the injury. The question arises here, as in other similar cases, did not the boy die of imagination?

—The Edinburgh *Medical Journal* has a poem entitled—

A PSALM OF HEALTH,

From which we quote the following:—

"Tell me not, in scornful numbers
Sanitation is a dream;
Woe be to the man who slumbers,
Thinking drains are what they seem.

Drains are real, bad gas injurious;
If the grave is not our goal,
All past systems are but spurious;
Carefully re-drain the whole.

Ill-drained houses all remind us
Sanitation is sublime;
Shunning the association,
Henceforth, shall be held a crime."

The Sizes of Distinguished Heads.

In *Nature*, Mr. Tuckett gives the following as the sizes of hats worn by different distinguished men. Lord Chelmsford, 6½ full; Dean Stanley, 6¾; Lord Beaconsfield, 7; the Prince of Wales, 7 full; Charles Dickens, 7⅛; Lord Selborne, 7⅛; John Bright, 7⅛; Earl Russell, 7¼; Lord Macaulay, 7⅜; Mr. Gladstone, 7⅜; Mr. Thackeray, 7⅝; Louis Philippe, 7¾; M. Julien, 7¾; Archbishop of York, 8 full.

Curious Malformation.

A curious case of malformation has occurred in the practice of Dr. Simon Kovrig, of Szamosujvar, in Hungary. The child, which was stillborn, has a "Janus head." At a point corresponding to the centre of the normal forehead, commence two completely developed faces with four eyes, two mouths, and two noses. Posteriorly, there is an ear on each side, and at the point of fusion of the faces anteriorly a third undeveloped ear is to be seen.

Investigations into Diphtheria.

Drs. H. C. Wood and Formad desire to know of the existence of an epidemic of malignant diphtheria, in order that they may continue their research upon the nature of the diphtheritic poison. Dr. Formad will go to any locality within eight hundred miles of Philadelphia. Letters may be directed to the University of Pennsylvania.

Vivisection.

—"Scientific experiments on organic life a necessity; no sin!" was the title of a sermon in favor of legitimate vivisection, delivered on Sunday evening, January 8th, by the Rev. Richard Hill, M.A., at St. Barnabas Church, Stockwell, England. Seats were set apart for the medical profession.

American Diplomas in Australia.

The Department of State has received an official communication from Adelaide, South Australia, from which it appears that an amendment has recently been effected in the medical laws of that colony, whereby the holders of foreign diplomas are entitled to be registered as duly qualified medical practitioners. The Department of State has accordingly been asked to furnish a list of all the schools of medicine in this country which issue diplomas or certificates of sufficient value to entitle their possessors to practice medicine in all its branches, and to hold government medical appointments. The necessary steps have been taken by our government to furnish this information, which will remove all obstacles in the way of American graduates practicing medicine in South Australia.

A Useful Book.

We have received very many letters like the following, which comes to us from a prominent New York physician:—

"Allow me to say a word of praise and recommendation of Napheys' *Modern Therapeutics*. I consider these volumes almost indispensable to every practicing physician, and of especial value to the younger members of the profession, who are not unfrequently at a loss to know how to combine medicinal agents in such a manner as to render them at once palatable and efficient. It is nothing less than a piece of professional good fortune for a practitioner to secure a copy of these works."

We make this quotation, not so much to bring these books to the notice of readers, as to illustrate their particular usefulness, which has not always been understood by those who have given them merely a passing examination.

Items.

—The American edition of Braithwaite is the *Quarterly Epitome*, not *Retrospect*, as we had it in a recent number.

—A man out West feared he was going to have the smallpox, and believing whisky to be a preventive, he drank about three quarts of it. A coroner's jury, the next day, rendered a verdict "that he died from excessive prophylaxis."

—A society of archæologists recently held a meeting. At the dinner a large fruit pie was produced. "What is it made of?" asked a visitor. "Blackberries, sir," said the first waiter. "Blueberries," said the second. "Whinberries," said the pretty maid. "Bilberries," said Professor Babington. "Whortleberries," said another botanist. "Huckleberries," said another. The first waiter, in despair, came to the most learned looking of the guests and said: "Sir, they say you are a good herbalist; what is the correct name of these berries?" "VACCINIUM MYRTILLUS," was the answer. Thereafter the waiter persisted in calling bilberry tart "*vaccination murderers.*"

OBITUARY NOTICES.

—Dr. M. C. Dean, formerly President of the American Dental Association, was found dead in bed at his home in Chicago, January 28th.

—Mrs. Mildred Smith Crosby, widow of the late Professor Alpheus Benning Crosby, M.D., of Bellevue College, New York, died at Galveston, Texas, recently. Mrs. Crosby was a daughter of the late celebrated Dr. William K. Smith, of Galveston.

—Among recent deaths was that of Dr. Joseph Barrett, of Middletown, Connecticut, in his 82d year. He enjoyed at one time a large practice, but gave it up to pursue geological studies. He discovered bird tracks in the Connecticut red sandstone, and became so enamored of such studies that he neglected his business and was popularly supposed to have become a monomaniac.

—Dr. Theodore Schwann, the well-known Belgian physiologist, died in January. Dr. Schwann was born in Neuss, in 1810, and received the degree of M.D. in Berlin, when twenty-four years of age. After serving as assistant naturalist in the Berlin Museum of Anatomy, he was appointed, in 1839, Professor of Physiology in the University of Louvain. Nine years afterward he left Louvain, to fill a similar position in the University of the Liege. Dr. Schwann was a member of the Brussels Academy, and in 1879 was elected a corresponding member of the French Institute. He was the author of numerous scientific works of great value.

QUERIES AND REPLIES.

J. K. L., of Pa.—We have received several letters from homœopathic physicians charging us with injustice in our editorial on "Consultations," especially complaining of our statement that such a consultation is, in a manner, "compounding a social felony." We take it for granted that any intelligent regular physician looks upon homœopathy as a delusion and an injury to science and to the public. If he does hold this opinion (whether right or wrong), for him to countenance this injurious delusion is nothing less, morally, than would be countenance and protection extended to any scheme for injuring people in person and property. This is what we meant, and we are convinced that we are right.

Dr. E. S., of Florida, asks us to correct and publish formula for "Delirium Tremens," April 30th, 1881, page 489. We have examined the formula there given, and the only exception we can note in it is the large dose of tinct. digitalis, two drachms. Such doses and even larger (f℥ss) have been used in delirium tremens with good results, though we would consider it rather reckless medication to employ such very large doses.

Dr. J. E. G., of Wisconsin, asks for a bread for diabetic patients.

Gluten flour, made, to our knowledge, by Farrell & Rhines, of Watertown, New York (and probably by others), is free from bran or starch, and possesses tonic and waste repairing properties. Its use would be indicated in diabetes.

Drs. B. and M., of Ohio.—Vitalized air is a catchpenny expression, and you do well to show up such attempts on public credulity.

Dr. D. A., of Ohio.—Please give exact reference to article on "Spectacles" you mention.

Dr. E. C. K., of Wis.—The fluoric acid referred to is a dilute, medicinal form of the chemical article.

BIRTHS.

VALENTINE.—At Guatemala, in January, Edith Rosette, daughter of Dr. F. C. and Mrs. Valentine.

MARRIAGES.

HABIRSHAW—READ.—On Wednesday, Feb. 1st, 1882, at Trinity Chapel, by the Rev. Dr. Eigenbrodt, John Habirshaw, M.D., and Adelaide M. Read, daughter of the late Arba Read, of Troy, New York.

KENNEDY—STARKS.—At Troy, New York, Feb. 1st, 1882, by Rev. George C. Baldwin, D.D., Dr. Robert Kennedy, Jr., of Philadelphia, Pa., and Miss Clarissa A., only daughter of the Rev. Dr. W. H. L. Starks, of Waterford, New York.

LITTLE—HETHERINGTON.—On Thursday evening, Feb. 9th, 1882, at the residence of the bride, by Rev. C. F. Turner, George Little, M.D., and Jennie Hetherington, both of Philadelphia.

NEWPHER—KEPNER—On Wednesday, February 1st, 1882, at the residence of the bride's parents, by the Rev. J. A. Peters, John J. Newpher, M.D., of Mount Joy, Pa., and Ella E. Kepner, of Lancaster, Pa.

RANDLE—HARMER.—On January 3d, 1882, at the residence of the bride's parents, by the Rev. G. D. Carrow, W. H. Randle, M.D., of Jenkintown, Pa., and Miss Mellie L., daughter of Hon. A. C. Harmer, Germantown.

DEATHS.

BROWN.—On Thursday, January 26th, Dr. W. T Brown, of Cincinnati, Ohio, in the 47th year of his age.

DODGE.—In Sprinfield, Vermont, January 25th, William L. Dodge, M.D., aged 38 years, 7 months, 14 days.

PARRISH.—On the 29th ult., at his residence in New York, Miers Fisher Parrish, in the 30th year of his age, son of the late Dr. Isaac Parrish.

SHACKLETON.—In Auburn, California, January 22d, 1882, Dr. E. L. Shackleton, formerly of St. Marys, Ohio, aged 42 years and 9 months.

SHARP.—In Salem, New Jersey, January 20th, Dr. Jacob T. Sharp, in the eightieth year of his age.

STARR.—Died, of hemorrhage of the lungs, at his residence, in Ames, Iowa, January 18th, Dr. Samuel J. Starr, in the 46th year of his age.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1304.] PHILADELPHIA, FEBRUARY 25, 1882. [Vol. XLVI.—No. 8.

Original Department.

Lecture.

GONORRHŒA IN THE MALE; ITS NATURE, CAUSES, AND TREATMENT.

Delivered in the Medico-Chirurgical College of Philadelphia,

BY CHARLES L. MITCHELL, PH.D., M.D.,

Professor of Chemistry, Sanitary Science and Venereal Diseases.

(*Concluded from page* 172.)

We now come to the treatment of gonorrhœa. This is accomplished by two methods, the local, or external, and the internal. The former consisting of the use of injections, insufflated powders and medicated suppositories; the latter, the internal administration of certain remedies, generally balsamics. I am not an advocate of the latter method, for while in certain cases the remedies act advantageously, it is a slow, cumbrous, disagreeable style of treatment, often doing more harm to the system than good, by the disturbances in digestion it occasions. I rely much more upon injections and other local remedies. It will be well to discuss for a few minutes the urethral syringe, and its proper use. I first show you the ordinary glass penis syringe. It is the most extensively used of all the syringes, but is generally faulty in construction, the tip being too sharp, and apt to irritate the mucous membrane of the urethra. The packing of the piston is made of soft cotton twine, and is generally loose, causing the injection to spirt from the back part of the syringe. Should the packing be well done the instrument then works stiffly. Here are a number of other styles, some good, some bad, and some indifferent. The most of them have too sharp a tip. The best form of glass syringe is the P. P. bulb syringe. It consists of a hollow rubber ball holding about half a fluid-ounce, in which is fixed a glass tube about three inches long, terminating in an appropriate tip. By compressing the ball so as to force out the air, and then placing the end of the tube in the injection, a quantity of the latter will be drawn up, and can then be ejected by gently pressing the bulb. It is much more easily worked than the piston syringe, as the stiff movement of the latter will cause a nervous patient much trouble. As ordinarily found in the stores, the tip is also too sharp; but I here show you one which has been made to order, having the proper shaped end. This should be a cone, at the apex being the size of a bougie No. 13 French scale, at the base No. 30 French scale. When made of this shape it will fill up the meatus, without projecting far enough in to irritate the urethra. The hard rubber piston syringes are of much better workmanship than the glass, and consequently to be preferred. They are expensive however.

Another great trouble in syringes is that they are generally too small. A good penis syringe should have a capacity of from f℥ij to f℥ss, preferably the latter, as a smaller amount of fluid will fail to thoroughly distend the urethra and allow the injection to penetrate into every fold. You should direct the patient to first pass his urine, so as to thoroughly wash out the urethra and prevent any of the discharge from being carried back by the injection to a healthy surface, where it may cause an extension of the disease. Then direct him to assume the recumbent position, if possible, take the glans penis between the thumb and forefinger of the left hand, and separate the lips of the meatus, and

introduce the tip of the syringe, pressing it gently inward until it entirely fills the meatus. Hold it in position by gentle pressure of the lips of the meatus against the tip of the syringe, and then slowly force in the injection from the syringe, until the urethra is fully distended. Then remove the syringe, quickly slipping over the meatus the end of the forefinger, so as to keep the injection from escaping. The liquid should remain *in situ* for full five minutes, at the same time frequently stroking the under side of the penis, so as to thoroughly distribute the injection. At the end of that time let that injection escape.

The medicinal treatment of gonorrhœa may be divided into that of three stages: 1st. The incipient. 2d. The acute. 3d. The subacute or stage of decline. If you can see your patient when the attack is just beginning, you may, in some cases, succeed in aborting it entirely. This is done by injecting a solution of nitrate of silver into the urethra, of such strength as to induce an active inflammation, lasting for four or five days, and thus supplant the morbid action, which may last for a much longer time. This mode of procedure has been very justly condemned. In some few cases it may abort the disease; but in the greater majority it aggravates the inflammation and increases the suffering of the patient. The trouble is that a patient is seldom seen in the incipient stage, as the symptoms are then so slight as to be often overlooked. When he does come for relief it is from the suffering of the acute stage, and then this treatment will only heighten his torment. I believe, however, with a careful selection of cases you may sometimes succeed, provided the injection be not too strong. The strength formerly used was from 20 to 30 grains of nitrate silver to f℥j of water (used once as an injection), this is entirely too strong, and I must unhesitatingly condemn it, as it will nearly invariably produce stricture. I have operated on several cases of stricture produced in this manner. The formula recommended by Bumstead (argenti nitratis, grs. ss–iss. aquæ, f℥ vj) is much more safe; it is to be used at intervals of three or four hours. In the course of twenty-four hours the discharge decreases, grows thin and watery, and tinged with blood. Now is the time to stop injection, and omit all medication for a few days, until we see how much good has been accomplished. If the treatment is successful, the discharge will totally disappear in four or five days.

In the acute stage of gonorrhœa the proper regulation of the diet and habits of the patient is a matter of great importance. If you can keep him in bed for a few days you will accomplish a great deal. If the testicles are at all tender they should be placed in a suspensory bandage. The diet during the active stage should be non-stimulating but nourishing, and all indulgence in liquors, particularly beer, ale, etc., should be strictly forbidden. The bowels must be kept open.

The first point in the medicinal treatment should be relief of the painful micturition, and the swelling and congestion of the penis. As the urine in this affection is apt to be acid and irritating, we should endeavor to render it bland and alkaline in character, and we therefore administer such salts as are decomposed in the blood with the liberation of an alkali. These are the alkaline citrates, carbonates and bicarbonates, acetates, tartrates, etc. They should be administered in their appropriate doses, largely diluted with water. As regards the use of flaxseed tea, and all other demulcent diluents, they are old women's remedies, and simply useless. The best time to administer the alkalies is *two hours after meals*. The officinal liquor potassæ, in doses of from 10 to 20 drops, is also a very good remedy, administered in the same manner. A prescription which I often use, especially when there is increased frequency of micturition and chordee, is the following:—

℞. Potassii nitratis, ℥ij
Potassii bromidi, ℥ss
Morphiæ sulphatis, grs. ij
Ext. gelsemii, fld., f℥j
Syrupi, f℥j
Aquæ camphoræ, ad f℥vj. M.

Sig.—A tablespoonful in half a tumbler of water, two hours after meals.

The urine should be repeatedly tested with litmus paper, and the quantity of alkali so regulated as to give it a neutral or slightly alkaline reaction. The penis should be kept lightly wrapped in a cloth constantly saturated with the following mixture:—

℞. Liq. plumbi s'ac, f℥iij
Tinct. opii, f℥j.
Ft. misturæ.

In addition, the patient should be directed every morning and evening to immerse his penis for about fifteen minutes in hot water. This should be so hot as to be on the verge of scalding; thus applied the pain is greatly relieved and the swelling of the glans and prepuce soon disappears. Should the prepuce be greatly swollen and infiltrated, it may be necessary to slightly scarify or puncture it with a sharp-pointed bistoury, so as to deplete the part. Should the urethra be very

sensitive, the inflammation high, and the meatus much contracted, the above should constitute the entire treatment, and no local measures be instituted until the more active symptoms have subsided. In the majority of cases, however, the channel is not so sensitive as to prevent the use of a syringe, and an opiate injection can be administered in addition to the previous treatment. This should consist of the following:—

℞. Ext. opii aquosæ, ℈j
or
Morphiæ sulphatis, grs. iv
Ext. belladonna alc., grs. v
Mucilaginis cydonii,
Aquæ, āā f℥j. M.

Sig.—Add a teaspoonful to a tablespoonful of hot water, and use as an injection, every four hours.

As soon as the acute stage begins to subside, the local use of an astringent must be commenced. With this should be mixed an opiate, until all painful symptoms have disappeared. Probably the best and most commonly used astringent is the sulphate of zinc; following it are the subacetate of lead and the acetate of zinc, while the astringent salts of copper, iron and cadmium, and the vegetable astringents, tannic acid, kino, catechu, krameria, etc., etc., prolong the list. I rather prefer the sulpho-carbolate or salicylate of zinc. In commencing with an astringent injection, it should not be too strong, and should not contain more than ¼ gr. or ½ gr. of the weaker mineral astringents to the fluid-ounce; of the vegetable astringents more can be used. but the stronger mineral astringents, such as the chloride of zinc and sulphate of copper, must be given in very small doses, and had best be left for more chronic cases. A very soothing remedy in the subacute stage is the liq. plumbi s'ac:—

℞. Liq. plumbi s'ac, ℥ss–℥j
Morphiæ sulphatis, grs. iv
Glycerinæ, f℥ss
Aquæ, ad f℥iv. M.

Sig.—Use as an injection, four times daily.

The subacute stage is the only one in which the balsamics, such as copaiba and cubebs, etc., should be used. I do not depend much upon them. They are most useful in bladder complications, where they are extremely valuable. They should be given in small doses, in either the form of an emulsion, or in a soluble gelatin capsule; of these the soft capsules are much the best, as they are more easily swallowed and have no taste. The essential oil of sandal has been highly recommended, but I have no faith in it, as I have found it to have very little value, and to so saturate the patient with its peculiar odor as to make him an object of attention and remark.

In the latter stages of gonorrhœa, where the discharge is profuse and watery, and where there appears to be a loss of tone and a relaxed condition of the mucous membrane, you will find the oxide of zinc to be a valuable agent, either alone or combined with a small quantity of hydrastis canadensis.

℞. Pulv. zinci oxidi, ℥ij
Mucilaginis cydonii, f℥iij
Aquæ, ad f℥iv.
or
℞. Pulv. zinci oxidi, ℥ij
Ext. hydrastis, fld., f℥ij
Mucilaginis cydonii, f℥iij
Aquæ, ad f℥iv. M.

Sig.—Use as an injection, three times a day.

You will notice in a number of these formulæ I have used the "mucilago cydonii," or quince mucilage. This is a bland, cooling vehicle, which is very grateful as an injection.

Another method of treating gonorrhœa locally is by means of "insufflation," or blowing powdered medicaments into the urethra. It is a poor plan. Another and much better method, is by the use of urethral suppositories. They are made of different lengths, of cacao butter or gelatin, the latter being preferred, on account of its flexibility, and act even better than injections. They must not be used in the acute stages, as a general rule, but act very well in subacute and chronic conditions.

By the use of the different methods which I have at length detailed to you, with such modifications as your judgment will suggest, I think you will have very little trouble in curing the great majority of your cases of gonorrhœa. It is still remains for me to speak briefly of the treatment of the two complications of chordee and hemorrhage. Chordee is best treated by immersing the penis in hot water, and by the internal use of the bromides, opium, hops and lupuline, etc. If the case is at all severe, you will find the above remedies to be inadequate, and then you must rely upon opiate rectal suppositories. These should be of morphia, ext. opium, ext. belladonna, or some other anodyne, given in full doses until relief is obtained. A very good formula is the following:—

℞. Chloralis hydrat., ℥ss
Camphoræ, grs. xij
Morphiæ acetatis, grs. ij
Ol. theobromæ, q. s. M.
Ft. suppos. no vj. (15 grs. each).

Sig.—One every hour, until relieved

Hemorrhage should be treated by the applica-

tion of cold to the penis. In severe cases a styptic injection, such as a weak solution of the subsulphate of iron, can be used, and in some cases a full-sized sound must be passed into the urethra, and a compress applied around the penis. A moderate amount of hemorrhage should not be restrained as it is more beneficial than otherwise.

And now, in conclusion, let me advise you to put your patients on good, rich, generous diet, as soon as the acute stage has passed, and if they are at all debilitated, give them tonics, such as the preparations of iron, quinine and strychnia. Also remember that your astringent injections must never be too strong, and that if the little stinging pain they occasion lasts over five minutes, the injection must be diluted, to act well.

COMMUNICATIONS.

A SIMPLE GALVANIC ELEMENT FOR THE TREATMENT OF CONSTIPATION.

BY WM. R. D. BLACKWOOD, M.D.,
Physician to St. Mary's Hospital.

Every physician is fully aware of the absolute necessity of a full and free alvine evacuation at least once daily, and he also knows that with very few exceptions a soluble condition of the bowels is of major importance in the conduct toward recovery of his patient, when suffering from disease. It is beginning to be understood that even in those maladies and operations in which the former practice was to lock up the bowel, it is now preferable to maintain a normal state, and simply prevent the diarrhœal effect which may be anticipated. It is most important, in the young, that the habit should be cultivated of attention to regularity in stool, and much of the prevalent dyspeptic tendency is undoubtedly due to neglect of this point. The indiscriminate use of aloetic and mercurial cathartics by the public, in the shape of patent medicines, against constipation, either with or without the sanction of their family attendant, is a growing evil, and should be checked, for much more harm is done in this way than is popularly understood. The canonical method of dealing with constipation presents little breadth in the materia medica employed, and treatment by drugs alone does not often radically *cure*, but merely *alleviates*. In my own practice the best results have been obtained in permanently securing a regular habit through attention to a regular time for defecation—say just after breakfast—combined with faradization and massage of the abdomen. The necessary mechanical or manual part of this process can be taught to the patient, or to the attendant; but the electrical treatment should, except in the case of unusually intelligent patients, be kept in the hands of the physician, for obvious reasons. Those of our readers who are fathers, can doubtless appreciate the trouble caused night after night by the infant, when dirty diapers had been scarce during the day, and how much relief baby had from the use of the old fashioned soap suppository. A recent improvement upon this time-honored instrument is presented in the galvanic suppository, illustrated; and, simple as it is, a somewhat extended experimentation has proved its value beyond a doubt. Although the whole arrangement can be placed in a moderate sized pocket-book, the current developed during its use is equal nearly to that from a small cell $1\frac{1}{2} \times 1 \times 5$ inches as determined by a sensitive galvanometer; the current strength being 2 millivebers when in actual use, and nearly 5 millivebers when the elements were placed in a moderately strong saline solution, as, for instance, sodium or ammonium chloride, and the conducting cord replaced by a wire six inches in length. The resistance interposed by the longer cord when in actual use, is so slight as to be disregarded. A simple method of testing the intensity of this little couple is, to insert the zinc negative, or cathode (*C*) into the anterior nares, pushing it up as far toward the frontal sinus as possible without eliciting discomfort, and placing the silver anode (*A*) or positive electrode, upon the tongue, keeping the conducting cord disconnected. Now make and break the circuit, by touching the separated pole with the pin at the free end of the cord, and the flash of light produced by all galvanic applications in this locality, through reflex on the optic nerve, will at once be developed. The current is sufficiently powerful to stimulate intestinal muscular contraction throughout its whole length, and its therapeutic effect is obtained by simply placing the anode upon the tongue and clo-

sing the mouth upon it, the cathode being passed nearly its whole length into the anus, the necessary acidity being supplied by the fluid in the mouth and rectum. In some patients a single application before going to, or while in the closet, for five to fifteen minutes, suffices; in others it should be used at bedtime and in the morning. In very obstinate cases the injection of an ounce or two of salt water into the rectum renders the action more intense, the fluid being retained until the stool is had. Its employment should be maintained for ten days or two weeks, and then gradually discontinued, the strictest attention being, of course, paid to regularity as to visiting the water-closet. That the effect is due to the galvanic current is proved by purposely interposing a non-conducting cord while experimenting, and by substituting plates which do not produce a current. The patients, of course, under these circumstances, were not aware of the defect, and, therefore, the imagination had full play, and the mechanical irritation induced by distention of the sphincters, was also active; yet the result was, in such experiments, uniformly negative. The current may be used in aural practice, by dropping a little salt water into the meatus, and entering the negative rod a short distance therein, the positive being placed upon the tongue. In the earache of childhood this manœuvre has been followed by good results, in a few cases in which it was tried, but the main object is to overcome constipation, and this the miniature battery will assuredly do, with but little perseverance, small expense, and neither trouble nor medicine.

The instrument is neatly made by one of the electrical instrument manufacturers of this city, and the cost is, I am told, quite moderate.

246 *North Twentieth street.*

LARGE UTERINE FIBROIDS—HOW TO DEAL WITH THEM.

BY WILLIAM VARIAN, M.D.,
Of Titusville, Pa.

About twelve years ago I developed to my preceptor, the late Washington L. Atlee, the following plan for an operation which I had devised for the destruction of large sub-peritoneal uterine fibromata, which seemed to me to combine efficiency with comparative safety to the patients. The methods hitherto attempted for the extirpation of these adenomata had proved so formidable and fatal as to disincline the profession from adopting them as a common surgical procedure. The time that has since elapsed has added but little to our resources. Normal ovariotomy (Battey's operation) promises much in small tumors, of this class, but how few in private practice can be induced to submit to an operation which is not without its risk, and which carries with it the prospect, repugnant to the female mind, of being unsexed. Immediate extirpation, with or without the uterus and its appendages, had proved so formidable and dangerous, that it was relegated to the place of heroic measures *en dernier resort.* The method which I had devised and carefully elaborated in my mind appeared to me to promise certain destruction of the growth with but little if any more danger than is incurred in laparotomy for normal ovariotomy.

The operation is as follows:—

After the usual primary incision of the abdominal walls through the linea alba, I proposed (*a*) to cut in the line of the original incision, through the capsule of the tumor; (*b*) to enucleate and remove so much of the fibroma as was convenient to the operator, and as could be done without endangering the patient from hemorrhage or shock. The amount thus removed being immaterial, as the taking away of a small portion assured the destruction of the growth as effectually as of a large; (*c*) to include the two incisions in the same sutures, and thus secure agglutination of the peritoneal surfaces; (*d*) after the expiration of a certain time, say from 24 to 72 hours, as the indications demanded, to remove so many of the sutures as were necessary to give free access to the cavity of the capsule; (*e*) by the combined use of therapeutical (ergot) and mechanical measures (the instruments and fingers of the surgeon), to remove the fibroma from day to day, *piecemeal*, as it was loosened and thrust forward by the contraction of the sac; (*f*) when this was accomplished pare the edges and close the external wound.

I claimed that by this course the operator would secure—

1. The shortest possible incision of the peritoneum. No mean advantage, since statistics show that the danger in laparotomy is greatly increased by extending the abdominal incision.

2. Total exclusion of blood or irritating discharges from the abdominal cavity by the early agglutination of the peritoneal surfaces. This reduces the risk of peritonitis to the minimum.

3. Absence of severe hemorrhage, excessive shock, and the necessity of exposing or handling a great extent of peritoneal surface. This avoids the principal factors of danger in all operations for rapid extirpation of these tumors.

4. Facility of access to the tumor. The surgeon has it directly under his eye and can ensure (*a*) The prompt removal of the mass as fast as it

is loosened from its capsule. This anticipates and prevents decomposition. (*b*) Thorough antisepsis, drainage, and, if necessary, irrigation of the sac. This removes almost all risk of septicæmia. (*c*) Perfect control over all tendency to hemorrhage. (*d*) Rapid extraction and removal of the fibroma by the mechanical and therapeutical resources of the surgeon.

I was urged by Dr. Atlee to carry my views into practical effect. He thought that my theory was good, and that it might prove a valuable resource in surgery.

About one year after this conversation I operated in this way upon a case which presented the most unfavorable features. The patient recovered perfectly and her life was prolonged for some years, but I learn that she has since died from an attack of acute pneumonia. An accident destroyed my notes of that case, and it was never published, but I will briefly state that the tumor was very large, adhesions were very numerous and vascular, and the patient was very anæmic, and so prostrated by weakness and pain as to have been confined to her bed for some weeks.

I believe the subject of sufficient importance to warrant the report of a recent case in detail.

Case xxxiv.—Ann R., age forty-seven, unmarried, American, twenty years ago met with an accident while riding a horse, and has been more or less of an invalid ever since. Catamenia first appeared at the age of fifteen, and have always been regular. Since the accident they have recurred every three weeks, and are very profuse during the first forty-eight hours. Are not accompanied with pain. Two years ago she first noticed a central enlargement of the abdomen, which increased more on the right side as it progressed. This growth has been continuous, and during the past six months has been very rapid. There has been a great deal of abdominal pain and soreness, but no history of local or general peritonitis. Her bowels move every day, but a sense of obstruction renders defecation difficult and unsatisfactory. The kidneys have long been in an unsatisfactory condition. The secretion of urine is scanty and she has been accustomed to use stimulant diuretics and gin to increase the flow. Appetite fair. Stomach digests reasonably well. She has œdema of the lower extremities, is anæmic and emaciated, especially about the face and upper portion of the chest. A very large and very elastic tumor fills the abdomen and pelvis. The elasticity is so great as to give a decided sense of fluctuation, which is especially marked when abdomino-vaginal palpation is practiced. The uterus is four inches in depth ; is movable, but does not move with the tumor.

Diagnosis doubtful. Probably, a fibroid. Possibly, an adenoma of the right ovary. The latter was the decision reached by the physician whom she had previously consulted. Patient was anxious for relief by operation, and was placed on treatment preparatory to that end.

Operation.—October 31st, 1881. Present: Doctors Kebler, of Corry ; Blaine, of Pleasantville ; Farrelly and Heath, of Townville ; Moody, Barr, Young, and Reilly, of Titusville.

The strictest antiseptic precautions were observed as regards room, attendants, instruments, and dressings. But the spray was not used. In surgery of the abdominal cavity "fort dem spray" has been my motto ; and a reasonably large experience has not yet given me reason to change my views.

The patient being anæsthetized, the usual abdominal incision was made through the linea alba, about three inches in length. This was afterward extended about two inches upward toward the navel, and one inch downward toward the pubis. The tumor was found to be a fibroid. An incision of five inches, in the line of the external incision, was made through the capsule of the tumor. The capsule was found to be about three lines in thickness over this portion of the tumor. The part immediately presenting was rapidly enucleated, and removed with knife and scissors. At the upper edge of the capsular incision a venous branch was divided somewhat longitudinally, and as it threatened to be troublesome, was secured by a silk ligature, passed through the capsule. It would have been easy to have enucleated and removed a very large portion of this tumor, as the hemorrhage was insignificant, but at this point the patient showed such marked evidences of intolerance of ether that the anæsthetic was withdrawn and the operation was brought to a rapid close.

The wound was closed with ten sutures of silver wire, passed as follows : Through the wall of the abdomen on one side, then through the capsule of the tumor on the same side, and, reversing the direction, out through the capsule and abdominal wall on the other side. By this course, escape of the contents of the sac was prevented, and speedy agglutination of the opposing peritoneal surfaces assured. The external incision was further secured by six superficial sutures of black silk ; the wound dressed antiseptically, and the patient removed to the bed.

Owing to the want of tolerance of the ether,

and so much of the operation being performed during consciousness of the patient, the shock was very great, more marked than in any of my ovariotomies, except one case of sarcoma of the ovary with chronic peritonitis and ascites. Reaction was, however, quite rapidly established, being apparently complete by midnight. The operation occupied about forty minutes, and was completed about 11.30 A.M.

At 6 P.M., the patient vomited, and blood freely oozed from the abdominal incision. I removed three wire sutures from the centre of the incision, cleaned out the sac, and packed it well with styptic cotton. The wound at this point was now left open, but supported by plaster. I was troubled with no more bleeding.

Nov. 1st, 8 A.M. Patient slept well most of the night; pulse 78; respiration 24; temperature normal; reaction fully established; is very cheerful; passed the catheter and obtained ℥ ij of urine, which is all that has been secreted since the operation. 5 P.M. Suppression of urine complete. Ordered pil. digitalis comp., one every two hours; free draughts of infusion of pumpkin seed and flaxseed, with spts. juniperis, as a stimulant; also quinquinia, 3 grains every six hours.

November 2d, 8 A.M. Suppression of urine continues complete; slight evidences of uræmia. Torpor, dullness, and slight jactitation when sleeping. To omit the digitalis pills, and take, every two hours, ℥ j of an infusion of fol. digitalis ℥ ij, fol. buchu ℥ ss, potass. nitratis ℥ ij to the pint. Apply a poultice of digitalis leaves and ground flaxseed to the back; also parvules of calomel, gr. $\frac{1}{20}$, every hour. Pulse 95. Temperature 100.

9 P.M. Got ℥ ij of urine. Patient brighter.

November 3d, 8 A.M. Drew off 8 ounces of urine. To omit the poultices and the calomel parvules; continue the infusion, ℥ j every six hours. During the day the kidneys continue active, and the condition of the patient steadily improves. Uræmic symptoms rapidly disappearing.

November 14th, 8 A.M. Had a good night. Pulse 85 and strong. Temperature 99. Complains of borborygmi and distention of the bowels. I removed, with knife and scissors, several large pieces of the fibroma. From this time until the termination of the case, daily, and sometimes twice a day, I removed the tumor as it was loosened and thrust toward the abdominal opening by contraction of the muscular fibres investing the capsule, in masses varying in amount from a few ounces to three and four pounds at a sitting. The amount removed each morning and evening depended partly upon the facility of removal, but principally upon the tolerance of the patient. I always stopped when she complained of fatigue, no matter how strong was the temptation to continue, as I was determined not to hazard any portion of her small stock of strength through my impatience to dispose of the tumor. The freshly incised surface of the fibroma was always dressed with ferri per sulph., to prevent oozing of blood, together with antiseptics. Until I reached the base of the tumor the bleeding was insignificant in amount; and at no time was there any discharge of pus from the sac. The discharge from the capsule was thin and sanious, small in amount and almost entirely devoid of odor, unless the removal of the loosened portions was too long delayed.

November 5th. Complains so much of flatulence and distention that I order a mixture of cascaris, rhei et sènna, and belladonna, which produced three easy movements and gave great relief.

November 10th. An active bilious diarrhœa set in; she had eight motions in the twenty-four hours. None of the evacuations were watery. Kidneys active. I decline to interfere with the catharsis, looking upon it frequently as "critical" in these cases, and to demand interference only when the strength of the patient is impaired by it.

November 12th. Tongue red and dry. Pulse 95. Temperature 101. A good deal of nervous irritation. Bowels moved twice in the twenty-four hours; dejecta loaded with bile. Removed between two and three pounds of the tumor.

November 13th. Condition unchanged. Increase the quinquinia to five grains every six hours. Give ℥ j of port wine every three hours.

November 14th. No improvement; very restless. Pulse 100. Temperature 102. Tongue red, dry, and fissured. Removed over four pounds of the fibroma in the morning and more than two pounds at night. I now learn that, without orders, the nurse had discontinued the use of the sedative during the last four days, and that my patient had been "on her nerve" alone during that time. Ordered thirty drops tinct. opii deod. to be given in a clyster and repeated p. r. n.

November 15th. Patient comfortable. Tongue moist and free from redness. Pulse 90 and firm. Temperature 99. This proves that nervous irritation was the main factor in producing the unfavorable symptoms of the last three days.

But a small portion of the tumor now remains a piece about the size of a small orange being

all that could be disposed of to-day. The blood vessels are larger and tend to free bleeding when severed.

November 16th. Patient feeble and disinclined to take nourishment. Tongue moist, clean, and of a natural color. Ordered beer soup, viz., hot ale or beer, sweetened, with a well beaten egg stirred in. Also rectal alimentation with beef tea, egg, and milk. Removed a portion of the tumor, size of a coffee cup, but the vessels are so large that I resolve to use the écraseur in future.

November 17th. Has rallied well and is comfortable.

November 18th. Still improving. While the patient was on the commode, at 1 P.M., there came a slight gush of blood from the sac, which produced some mental shock. The bleeding was easily controlled by the nurse, who is a woman well suited to emergencies. I surrounded a mass of the tumor as large as the bowl of a goblet with the twisted wire of my écraseur. When nearly severed the wire broke and I was obliged to strangulate the mass with whipcord and sever with the scissors. No hemorrhage.

November 19th. Again strangulated and cut away with the scissors.

November 20th. Several small masses thrown off spontaneously.

November 21st. All that remains of the tumor this day removed. A thick fleshy pedicle is all that remains at the bottom of the sac. Sac walls are so contracted as almost to touch, and are only two inches deep.

November 24th. Patient enjoyed sitting up and eating a good allowance of Thanksgiving turkey and trimmings. Can bear her weight on her feet and take two or three trembling steps.

December 1st. Removed with scissors the thick fleshy pedicle, which alone prevents the closure of the sac. No hemorrhage.

December 5th. Pared the edges of the opening in the abdominal walls and brought them together with silver sutures.

From this time the patient gained daily in health and strength, and on the 20th of December took the cars for her home. Cured.

The estimated weight of the tumor thus destroyed was between twenty and twenty-five pounds.

The above procedure is applicable to all those cases which have reached a size too great to render them amenable to destruction by other medication or Battey's operation. No extent or character of adhesions will interfere with the operation, or endanger the result. It is our duty to attack all fibroids which have attained such size as to destroy the health and comfort and threaten the life of our patient. I claim that I have demonstrated how this can be done with comparatively small risk of failure; and although the course proposed offers nothing specially new, or specially brilliant, but is, on the contrary, slow and plodding, yet if the majority of our patients will get well when thus treated, and a large proportion will die when more heroically and brilliantly handled, let us abandon the desire to display our skill, for the sake of winning the gratitude of our patients by prolonging their lives.

FOWLER'S SOLUTION IN THE TREATMENT OF TETANUS.

BY WILLIAM A. BYRD, M.D.,
Of Quincy, Illinois.

In looking over the late treatises on surgery, I do not find any allusion to the treatment of tetanus by the use of arsenic, in any of its forms; not even in the able addition of Dr. J. S. Jewell to Holmes' System, Am. ed. In a conversation with Dr. John T. Hodgen, last fall, he spoke so highly of the use of Fowler's solution in the treatment of tetanus, that I resolved to put it to the test in the first favorable case that presented. December 5th, 1881, George Schell, a robust laborer, presented himself for treatment. Three weeks before he had received a cut with a stave-shaping machine, on the ring and middle fingers of the right hand, cutting off about half the nail, and last phalanx of the middle finger, and splitting the end of the ring finger for about three-quarters of an inch. He had been under treatment elsewhere, and the fingers were coated with a salve that had shrunken in drying, and had cracked open, curling up at the points of fracture, something like shellac varnish does when applied too thickly to any surface. The wounds were very much irritated, and very painful. The sweat was standing upon his skin in great drops; his tongue was heavily coated with a brownish-yellow, pasty mass; he was unable to open his mouth over a quarter of an inch, on account of pain in the masseter muscles. There was pain of a paroxysmal type along the whole of the back, aggravated by a draft of wind or a touch of one of the affected fingers. This pain was so intense that he would at times fall down and cry out with it. When attacked with one of these paroxysms, his head and heels would be drawn backward, but not enough to call it typical opisthotonos. The first two days I treated the fingers with emollient applications to get off the salve that was constricting them, and gave ten grains of chloral hydrate and fifteen grains of bromide of potassium, every

hour, to allay the pain and to correct the spasm. The appearance of the fingers improved under this treatment, but the general symptoms became worse. I then decided to use Fowler's solution, in large doses, as recommended by Dr. Hodgen, with the exception of giving it by mouth, instead of by hypodermic injection. This I did because there was no irritability of the stomach. He was given ten drops of Fowler's solution, every three hours, for forty-eight hours, and the symptoms closely watched. At the expiration of which time he was so much better that he was given the same amount every six hours. He steadily improved until the 16th, when excessive granulations began to spring up on the wounded surface, on the middle finger, and the nervous symptoms began to reassert themselves. There being no abatement, on the 19th, with the assistance of Dr. G. Connell, I amputated the middle finger at the middle of the first phalanx. All went well until the 22d, when there was found an abscess in the middle of the palm of the hand, requiring to be opened. Upon making the opening there came out a piece of white, swollen, macerated nerve, about one-fourth of an inch in length. When dressing the wound the next day, another piece about the same size came away, and the next day a piece about half an inch in length came away. From this time on he made a speedy and satisfactory recovery. Although amputation had to be resorted to in the end, yet the arsenic exerted so prompt an effect for the better, when chloral and bromide of potassium had failed, that I am satisfied that it deserves all the praise bestowed upon it by Dr. Hodgen, who credits Dr. A. S. Barnes, of St. Louis, with having suggested its use to him many years ago. Any of my readers who desire to read an account of it, written by the doctor himself, will find a very interesting article in the St. Louis *Courier of Medicine*, for December, 1880, p. 519. To Dr. G. W. Connell my thanks are due, for assistance and counsel throughout, in the treatment of this case.

February 10th, 1882.

Hospital Reports.

PENNSYLVANIA HOSPITAL.

SERVICE OF DR. LEVIS.

Reported for the Medical and Surgical Reporter by RICHARD DOUGLAS, M.D.

Inflammatory Hypertrophy of Legs.

This is one of the most obscure cases that I have ever met. There are certain symptoms connected with the case which indicate the general condition, but do not proclaim a diagnosis. This boy was admitted to the hospital some months since; at that time his condition was about as it is at present, exhibiting the greatest constitutional debility, accompanied by this most peculiar local condition of the lower extremities. The knee joints were enlarged, excessively painful and pitted upon pressure, while the entire surface of the legs was rough and scaly, and the slightest movement gave rise to intense pain. This condition had been developing about two years, and could not be attributed to any special cause. Upon the history and the symptoms presented, after a careful study of the case, the resident surgeon considered it elephantiasis, and has treated the patient for that disease.

First. He has endeavored in every way possible to build up the generally depraved condition of the patient. The local treatment consisted in elevation and support of the limb, and iodine applications were for a time used. Now, while I cannot agree with the doctor in his diagnosis, I certainly indorse his treatment as being the only rational plan that could be pursued. When I first saw the patient, I deemed the end near at hand; but under the supporting treatment life has been prolonged several months, though I cannot see that there is any manifest improvement either in the local or general condition. My reasons for not considering the case *elephantiasis*, are briefly as follows: Elephantiasis is by most pathologists considered an inflammatory disease, affecting chiefly the lymphatics, obstructing their calibre, preventing the return of lymph to the *thoracic duct*, causing an exudation of that fluid, which becoming organized gives rise to great hypertrophy of the cutaneous, subcutaneous, and connective tissue. The vessels become enormously hypertrophied, hence the profuse bleeding attending operations upon structures thus affected. The extremities bear a striking resemblance to the legs and feet of an elephant; hence it takes its name. Such is, briefly stated, the pathology of elephantiasis. You must see how widely it differs from this case. Here we have some enlargement, it is true. The skin, though changed in hue, does not present the hypertrophic characteristics of elephantiasis. Therefore, I do not hesitate to say this is not a case of that nature, though in many points closely resembling it. But, gentlemen, if it is not that disease, what is it? No doubt it is due to some interference with the lymphatics. What that trouble may be, I am unable say. My friend, Dr. Little, of London, England, who is present, may be able to enlighten us.

Dr. Little being called upon, made an examination of the patient, and then addressed the class:—

Gentlemen! To me this is certainly an anomaly. When the case first came in, I at once thought it one of rheumatoid arthritis. But upon learning the history, and by an examination, I have changed my views entirely. It is not rheumatoid arthritis, nor is it elephantiasis. It is a condition too complicated to admit of an easy diagnosis; the great disorganization that has here taken place transcends the limit of almost any one disease. Dr. Levis is no doubt correct in attributing the trouble to the lymphatics. If the general condition of the patient was better, the surgeon would be justifiable in resorting to double amputation.

Five weeks later he was again brought before the class. The following remarks relative to his condition were made by Dr. Levis:—

When this case was before you upon a previous occasion, we found it impossible to arrive at a diagnosis which would warrant us in taking any active measures. He is before you again this morning, and while I cannot see any appreciable change in his general condition, there have been certain local developments which render the pathology clear. This boy is of syphilitic diathesis. I regard this deplorable state the outcome of that disease. You notice the great deformity of the legs; they are both enlarged, out of all proportion, pit upon pressure, are covered with a serous exudation. Should we confine our examination to the lower portion of the limbs we would be at sea for a diagnosis; might possibly call it elephantiasis. We have but to examine the knee joint, and the mystery explodes. You at once notice the great prominence anteriorly. So, likewise, a smaller posterior prominence, which, if examined closely, is found to be, in general contour, much like the head of the tibia, in fact, that is just what it is. The anterior prominence is the lower end of the femur, which, under the action of disease, has become enormously hypertrophied, and then, under muscular and other influences, the tibia has been partially luxated backward. This hypertrophied bone has encroached upon the vessels, especially the lymphatics and veins, occluding their calibre and thus preventing the flow of their contents back into the economy, hence there has been a continued exudation and organization of lymph; in this way the pathology resembles, somewhat, elephantiasis. But here it is dependent upon purely a mechanical cause. There is also, probably, nerve pressure. There is no possible way of obtaining relief, save by resorting to amputation, above the seat of disease; it is true, the patient is in a most deplorable state, but it must be obvious to all present so long as the cause of the disease remains there can be no improvement. Amputation gives the boy a chance for life, and I shall at once submit him to it.

The patient being thoroughly anæsthetized, an Esmarch's bandage is applied to each limb, from the foot up to the middle of the thigh; just here we apply the rubber band; this thoroughly constricts the parts and will enable us to complete the operation without loss of blood. I shall amputate above the junction of the lower with the middle third. It is a matter of small consequence what form of amputation we choose. I generally prefer the antero-posterior flap operation in this locality. The method of procedure is as follows: Grasping the limb about the centre of its circumference, with the left hand, and fixing the thumb and index finger at opposite points, as guides, with a long scalpel in the right hand, I make a curvilinear incision from point to point. The curve, of course, must be directed with its convexity downward, and will vary in accordance with the desired length of the anterior flap. I always prefer a long flap anteriorly, and a proportionately short one posteriorly. This first incision must extend down through the superficial parts to the muscles. This flap, consisting of cutaneous and connective tissue, is dissected back about three-fourths of its length. We then, with a circular sweep of the knife, divide the muscles at this point, thus cutting through the vessels transversely. The bone is next sawed through. The stump is dressed in the ordinary manner, and after washing out all clots and debris with carbolized water, with a Davidson syringe, the operation is complete. Both limbs were treated in the same manner.

Infra-Maxillary Neuralgia.

This woman, aged seventy years, is a great sufferer from neuralgia in the infra-maxillary region. You are aware that all tissues of the body, in the old, undergo somewhat of a retrograde metamorphosis. The vessels take on calcareous or fatty degeneration. The muscles become attenuated; the intimate structure of the bones is changed; they lose, to a certain extent, their animal constituents; the lacunæ and canaliculi are obliterated by the deposit of earthy salts; thus they are deprived of their vitality, become fragile, and are rendered liable to disease and injury. These senile changes are, perhaps, more manifest in the inferior maxillary than in any other bone. You know the greater portion of that bone is composed of soft, cancellous structure, with large alveoli for the reception of the teeth. In the old the teeth fall out, the alveoli become obliterated and the bone shrinks in size. The canals through which the minute branches of the dental nerve ramify, becoming partially obliterated, the terminal filaments of the nerves are pressed upon, giving rise to intense suffering. The neuralgia attending organic lesion to the nerve itself, or arising from the pathological condition referred to, is constant in character, and differs markedly from the intermittent form of the disease depending upon malarial or other influences. Organic neuralgia (so to speak) for a long time baffled the skill of the profession, but within the last quarter of a century it has been found a cure can only be effected by a complete excision of the nerve affected; this operation has been practiced by many, to quite a bold extent, and has been frequently followed by miraculous results. I have performed it in quite a number of rare cases, with most satisfactory results, but have always met with one great difficulty, the tendency of the divided nerve to unite, and thus establish the same old trouble. In excision of nerve trunks, I have not only removed some portion of the cord, but have taken the precaution to turn the divided ends back into the muscular tissue, hoping in this way to cut off all possible chance of reunion; but even in these cases I have been surprised, in cutting down upon the part, later, to find the divided ends had come together. Therefore, I repeat, in order that the operation may be followed by permanent cure, complete excision of the affected cord is required. One year ago this old woman came under my care suffering with infra-maxillary neuralgia. I decided to excise the affected nerve, and performed the operation as follows: A curvilinear incision, about two inches in length, with convexity downward, was carried over the ramus of the jaw; the flaps thus made were dissected up, the bone laid bare, the trephine applied, and a disk of bone was removed, the dental vessels

and nerves exposed in their canal; the nerve was raised on a hook, and pulling backward, about one inch of it broke off in the canal and was cut away. The parts being washed thoroughly with carbolized water, the flaps were brought into close approximation, the ordinary dressing applied, and the operation completed. The wound healed by first intention, and for ten months the patient was entirely free from neuralgia. Two months ago the trouble returned. She is here to-day, in the hope of again obtaining relief. There is no doubt in my mind, that new nerve tissue has been formed to supply the gap made by the excision one year ago, and the impression made upon the sensory filaments is conducted uninterruptedly back along the cord. I shall to-day perform a more thorough excision; attempt to expose the nerve at its entrance into the dental foramen, and remove the entire portion lying in the canal. The infra-maxillary nerve makes its exit from the skull through the foramen ovale, and enters the inferior maxillary bone on the inner surface about one inch below the sigmoid notch, one inch and a quarter above the angle, and a quarter of an inch anterior to the posterior border of the ramus. Now, I wish to expose the nerve just above this point, as it lies upon the bone before entering the foramen. In order to reach it we would ordinarily apply the trephine. To-day I propose using the dental or surgical engine, as it is called. This engine, an ingenious invention of Dr. Bonwill, a dentist of this city, has proven of much value to the surgeon in operations upon bones. The feature of the instrument consists in a spindle, which, by means of a somewhat complex arrangement of wheels, is made to revolve many thousand times per minute; to this spindle you can attach the instrument most desirable for the purpose to be accomplished. For the operation of trephining, Dr. J. B. Roberts has modified the ordinary burr used by the dentist, and has fashioned a burr which presents two cutting surfaces, one on the flat end and the other on the circumference. It strikes me that this is particularly well adapted for trephining. Commence by making a groove with the edge, and as it cuts its way we turn the flat end directly down upon the bone: we are thus enabled to perforate the bone in much less time than is ordinarily required in manipulating the ordinary trephine. The advantage of having the cutting edge upon the circumference is, that by means of it we are enabled to enlarge the opening laterally to any desired extent. I shall apply it to this bone, and you will see how excellently it serves our purpose. Having removed a circular portion of bone, about one-third of an inch in diameter, I now enlarge the hole laterally and search for the dental nerve. Our calculations were correct; here it is, exposed, just at the foramen: grasping the nerve with my forceps, I pull it out from the canal, with my scissors cut away this portion (about two inches in length). The approximal end I stretch well, a procedure I think of much value in all operations upon nerves. You notice, gentlemen, there is a rupture of a small artery. This will not require ligation; the hemorrhage is readily controlled by pressure with the hand in the mouth, or by pluging the hole with sponge. Having removed all debris, cleansed the part thoroughly with carbolized water, and adjusted the flap by silver sutures, the operation is complete.

WESTERN PENNSYLVANIA HOSPITAL, PITTSBURGH, PA.

Reported by V. Kersey, Resident.

Three Cases of Tetanus.

Case. 1.—Wm. McF., aged 35, single, a moulder by occupation, of temperate habits, with history of previous good health, was admitted to this hospital, May 29th, 1881, with a crush of the right hand. The hand was run over by the wheels of a passenger railway car, and the palmar portion and all the fingers except the proximal phalanx of the index, and the thumb, were crushed. The integument of the palm retained its connection with that of the forearm by a slender pedicle of integument.

Dr. C. B. King decided to make an attempt to save the hand. The fragments of phalanges were removed, the extremities of the bones rounded off, with bone-pliers, and a few sutures of fine silver wire introduced. The hand was then enveloped in warm cloths, and grain ¼ of morphia sulph. administered hypodermically.

June 1st. The palmar flap is of a very dark color, and a distinctly gangrenous odor is observed. The hot applications are continued. Temperature and pulse normal.

Upon June 4th, the flap was dead, and was clipped away with scissors. Patient complains of stiffness and pain on opening the mouth. Was ordered gr. xx of chloral hydrate, every third hour.

June 5th. Marked rigidity of muscles of posterior-cervical region; complains of headache and lumbar pains; bowels open; takes liquid nourishment freely. The jaws cannot be separated further than one-fourth of an inch.

A secondary amputation of the member was decided upon. This was performed, by the flap method, at the middle of the forearm. Vessels secured by torsion, and dry dressing applied.

June 6th. Rigidity increases; lies upon his side, with head thrown far back, and trunk arched forward; had two or three mild exacerbations of rigidity, succeeding paroxysms of coughing.

During these increases of rigidity the breath came hard between the set teeth, the respirations were shallow and irregular, and he complained of pain. Increased chloral to gr. xxx, every two hours. The patient had no more well marked spasms than those described above, but the general rigidity steadily increased. The jaws became inseparably locked at about 3 P.M., and continued so until his death. The death occurred at 3.30 A.M., June 7th, nine days after receipt of injury, and five days after onset of tetanic symptoms.

Case 2.—Benjamin F. C., aged 18, single, brakeman, of temperate habits and previous good health, was admitted June 21st, 1881. This man had suffered, twenty-five minutes before admission, a crush of the right lower extremity to within six inches of the trochanter major, a loaded car or two having passed over the limb. Within one hour of the time of receiving the injury the member was amputated by Dr. James

McCann. After securing, by ligature, the femoral vessels, in the wound, lateral flaps were formed and the bone sawn across, about three inches from the trochanter major.

The wound was closed by silver wire sutures, a dressing of resin cerate and dry absorbent cotton was applied. External heat was applied, and half a fluid ounce of whisky, with thirty minims of aromatic spirits of ammonia was administered every two hours.

June 23d. Some gastric irritability being present, the stimulants were withdrawn, and the amount of beef tea and milk was increased. The bowels moved freely, and patient is quite rational.

June 26th. The stump was examined to-day for the first time; the edges were adherent throughout most of the extent, though at two points small superficial sloughs appeared. Complained of pain and stiffness in the jaws. The brow was corrugated; the sterno-cleido-mastoid muscles were abnormally prominent and tense. Ordered grs. xxx of potassium bromide, every third hour; also a large, hot poultice of flaxseed meal to envelope the stump.

June 27th. The rigidity of the muscles steadily increased, extending to the abdominal and dorsal, and muscles of arm and forearm. He had no convulsions. During the last few hours of life he was unable to separate the jaws enough to admit the ingestion of anything in the shape of food or medicine. He died quietly, six days after receipt of injury, and forty hours after onset of symptoms.

Examination of stump after death showed, 1. Large, bulbous and congested end of sciatic nerve. 2. The branches of the anterior crural, and the trunk of the sciatic were ecchymosed and softened. The vessels presented no features worthy of note.

Case 3.—Wm. F., aged twenty-three, single, brakeman, of temperate habits, with no history of previous injury or sickness, was admitted, September 13th, 1881, with the following history: Four days ago he was coupling cars, and had the index and second finger of the left hand crushed between the "drawheads." The second finger was amputated at once, but efforts were made to save the index finger.

When admitted to the hospital, he had recived no attention, except that bestowed at the time he received his injury. The finger, when divested of the dressings, was found to be in a state of gangrene. Hot flaxseed meal poultice was applied and patient placed in bed. The next day Dr. J. B. Murdoch ordered the hand to be placed in a hot water bath, except at night, when it was to be placed in cloths wrung out of hot water.

September 19th. A line of demarcation having been formed, the finger was amputated at the metacarpo-phalangeal articulation, wound closed by silver wire sutures, and dressed with dry absorbent cotton. In ten days (September 29th) the stump of index finger was healed, and that of the second finger nearly so.

October 1st. The stump of index finger has a small abscess upon one side, which was opened to-day; a small amount of sanious pus escaped.

October 3d. Stump of second finger healed; abscess on stump of index finger nearly closed.

October 4th. Patient has been up and about the ward for past eight or ten days. Complains, to-day, of stiffness and soreness of the muscles of jaws, neck and back. Pain on mastication and deglutition, and on attempting to bend the trunk. He was ordered to bed, and a hot poultice placed about the entire hand. Gave him grains x of chloral hydrate and grains xx of potassium bromide, every three hours.

October 9th. Complains of moments of smothering, during which he is compelled to sit erect in bed to get his breath. Jaws are rigid; cannot be separated wider than a quarter of an inch. Mental faculties are dull. Owing to the fact that he had not been sleeping well, he received one grain of powdered opium, and in two hours the dose was repeated. He got no sleep, however. The bowels were maintained in a loose state, by daily administration of comp. cathartic pills.

October 11th. By order of Dr. Murdoch, the hand was immersed in the continuous hot-water bath (105° Fahr.). Dose of chloral and of bromide increased, the former to xx grains, the latter, to grains xl.

October 16th. The rigidity has almost entirely disappeared. Patient sleeps very well, and time between doses of bromide and chloral is lengthened from three to four hours. Bowels are freely moved every day.

October 23d. Removed the hand from water bath, and allowed the patient to get up and move about, within doors.

It is now nineteen days since the symptoms and signs of tetanus were noticed in this case.

November 26th. During past four weeks the patient has received no medicine, except an occasional purge.

November 28th. He is discharged cured.

In connection with the foregoing cases, the following points are considered worthy of note: 1. Absence of a well-marked convulsion. 2. Absence of fever. 3. The difference in treatment.

Abortion Without Pain or Hemorrhage.

Dr. William Girdner, of Greenville, Tenn., relates the following unique case in the *Medical Gazette*, November 26th, 1881:—

Martha G., aged twenty-seven years; married; multipara; pregnant about nine weeks. About six o'clock on the morning of October 20th, when entering the dairy door, it fell from its hinges, and knocked her to the ground. She got up, feeling no injury, and went about her household duties as usual.

About five o'clock the same afternoon, when in the act of micturition, a fœtus dropped from her, about the size of a small mouse, the act being wholly unattended by pain or hemorrhage.

About three hours later the secundines came away without hemorrhage, and with only a slight trace of pain. I saw her on the 22d of October, two days after the abortion, and she expressed herself as well as usual. There has been no discharge of any kind from the vagina to indicate rupture of the attachments of the contents of the impregnated uterus, nor have pain or any other symptoms been present as evidence of this interference with the physiological process of gestation.

Editorial Department.

Periscope.

Filaria Sanguinis Hominis.

From the London *Lancet* we note that in the twenty-first issue of the Chinese Customs Medical Reports, Dr. Myers records some further interesting observations concerning the filaria sanguinis hominis, made in the island of Formosa. It seems that although this island is only separated from the main land, where filaria disease abounds, by a channel 180 miles wide, three cases only of elephantoid disease have presented themselves in nine years among 15,000 general hospital patients, and the three filaria infested persons Dr. Myers saw all came from the main land (Amoy and district). This fact, that the disease does not spread in the island, as Manson conjectured it might have done into Barbadoes, is the more remarkable, as communication with the main land is constant, and there is an abundance of mosquitoes, so that Dr. Myers surmises that the particular species of mosquito which is the true intermediary host of the filaria exists on the main land, and probably not on the island. He is at present carrying out a systematic investigation of the different species of mosquito. First, Dr. Myers put a conveniently willing and infected man to sleep in a gauze-covered mosquito house, into which he turned mosquitoes collected promiscuously from all parts of Formosa. These gorged insects he examined day by day, and found that the next morning after their feed they contained several lively embryos, which at later date became digested, and had evidently not got into their true host, for Manson has found that mosquitoes containing filaria sanguinis hominis, when fed on an infected dog, digested the filariæ of the latter. Secondly, Dr. Myers has also made some observations on the periodicity of the appearance and disappearance of the filariæ embryos in respect of the blood circulation, in the case of a man suffering from glandular swellings and recurrent lymphatic fever, but otherwise healthy. The tables given show a result in complete accord with Manson's observations. The embryos appeared in the blood circulation regularly between 6 P.M. and 8 P.M., generally a little after 6 P.M., and were present in greatest numbers about midnight, after which they gradually decreased, and pretty well disappeared by 6 A.M. to 8 A.M. This period of twelve hours is just the time that, as Manson has shown, the mosquito is in active search for food. Thirdly, Dr. Myers tries to make out what becomes of the embryos when they disappear from the blood circulation, whether this disappearance is final as regards the swarm, and caused by death, or whether they only lie dormant for the time, perhaps in some viscera, as the lungs. He made prolonged and careful observations on the condition of the embryos at the times of their appearance in the circulation and their disappearance, and he found that the most marked and unmistakable contrast existed between their excessively active, vigorous condition at the former time and their increasingly torpid and feeble, shriveled, straightened out state at the latter time. He thinks the disappearance is final as regards the swarm, and he further argues that unless the parent or parents breed only once, or at long intervals, the circulation would get almost blocked by the myraids of filariæ if there were not some more wholesale method of removal than mosquito sucking. Dr. Myers suggests the possibility of the diurnal solution of dead embryos. Fourthly, Dr. Myers watched the behavior of the embryos with such substances as bisulphate of quinine, salicylic acid, arsenious acid, and santonin. The quinine affected them most, but the upshot of the matter is that the quantity of any of these substances necessary to kill the embryos would kill the host also. The problem, therefore, seems to be how to diagnose the exact situation of the parent worm (generally lying in the superficial glands) with an accuracy sufficient to extract it.

Cardiac Hypertrophy and Renal Disease.

Apropos of this interesting subject the *Lancet* says:—

The problem of the subordination of cardiac hypertrophy to renal disease, when the two coexist, to which so much discussion has been lately devoted, has engaged the attention of M. Straus, of Paris, who has published in the *Gazette Médicale* a preliminary account of his experimental results. The difficulties of the problem of the relation of the heart to the kidney lesion depend upon the complexity of the morbid conditions present in the system. These are much simplified in an experimental inquiry, although the results thus obtained have not always been very decisive. It is difficult to preserve for long the life of animals after a lesion of both kidneys, and Straus has therefore contented himself with causing atrophy of one kidney by ligature of the ureter. Previous experiments of the same kind have yielded contradictory results. Simon, Rosenstein, and Gadden, observed no cardiac consequence; Beckmann, Grawitz and Israel, and Lewinsky found a resulting hypertrophy of the left ventricle. The experiments of Straus were made on twenty guinea pigs, which were killed from four to six months after the operation. A pure hypertrophy of the left ventricle was found to be the invariable result. The average weight of the heart, for instance, in three cases was 2.76 grams, while that of three healthy animals was only 2.25 grams, and this although the average weight of the guinea pigs operated upon was two hundred grams less than that of those selected for comparison. The hypertrophy was uncomplicated by any degeneration of the muscular substance of the heart, and was apparently the direct result of the atrophy of the kidney, since the arterioles in various parts were examined and

found to be healthy. Grawitz and Israel asserted that although cardiac hypertrophy might follow a renal lesion in old animals, in which the other kidney did not sufficiently overgrow to compensate for the loss, this result was not to be obtained in young animals. This statement is disposed of by the experiments of Straus, since nearly all the guinea-pigs he experimented upon were young. Moreover, he was unable to observe any inverse relation between the degree of hypertrophy in the heart and kidney, such as should obtain if the conclusions of Grawitz and Israel were correct. In one of the cases in which the increase in weight of the heart was greatest, the remaining kidney had increased to at least double the normal weight. An objection which is often urged against the dependence of cardiac hypertrophy on renal disease is the absence of such hypertrophy in cases in which the kidney suffers in consequence of an affection of the urinary passages. But Straus relates, to show that hypertrophy may be found in these forms, two cases of women dying from uterine cancer which had compressed the ureters, and had caused dilatation of the pelves of the kidneys and very marked renal lesions. In each there was considerable hypertrophy of the heart without any valvular lesion. In a discussion on this paper at the Société de Biologie, an interesting and apposite case was related by Quinquaud. A man of twenty-eight years of age was shot in the left lumbar region, and recovered after an illness attended with hæmaturia. At this time there was no hypertrophy of the heart, but distinct evidence of this was discovered two years afterward. He died with symptoms of uræmia four years later. The left kidney contained an old abscess, the right was hypertrophied, and the heart was increased in weight to eighteen ounces, in consequence of hypertrophy of the left ventricle. All the liquids of the body were found to contain a large excess of urea.

A Case of Rupture of the Bladder.

T. J. Call, M.D., M.R.C.P. Edin., contributes to the London *Lancet* the following case:—

J. R., a chimney-sweep, between fifty and sixty years of age, had for a long series of years suffered from stricture of the urethra, through which, and only by dint of coaxing, a No. 3 was the largest size of catheter which could be passed. Although this stricture was the cause of frequent complete retention of urine, and at the best of times water could only be passed through it in a very feeble stream, he would not consent to have any operation performed for its relief, nor would he attend with sufficient regularity to have it gradually dilated. He was content to go on as he had been doing for over twenty years, and to present himself in the out-patients' room once in every week or two, in order to have his bladder relieved.

One afternoon I happened to be passing his house when his wife called me in. I found him walking about the room, evidently in great pain, with no other clothing on than his shirt, and his bladder enormously distended; as, according to his usual custom, though repeatedly cautioned against it, he had, in the hope of being able to relieve himself, been drinking freely of gin and spirits of nitre ever since the morning, when the retention had begun. Not having a catheter with me, I told him I would obtain one, and come again. As his house was only about five minutes' walk from the Infirmary, I should be back to him within a quarter of an hour from the time of my first seeing him. I now found him in bed, entirely free from pain, and the floor of the room swimming with water. On asking what had happened he told me, and his wife confirmed what he said, that while walking about, the water suddenly, and without the slightest warning, came, in one great gush, through the anus. That something of the sort must have occurred was evident from the fact that it would have taken more time than I had been absent for the large amount of urine to have dribbled through the stricture; besides, there was both his own and his wife's testimony to the fact, and there was no reason why they should deceive me. Fearful of the consequences of urinary infiltration, I enjoined perfect rest; but the next morning I found him going about as usual, quite well, and voiding urine in the manner to which he had been so long accustomed.

Just one week after this I was asked to visit him, and again found him suffering from retention. This time, however, I was unable to pass the catheter, and, as he was suffering frightful pain, I got Dr. Easton, one of the visiting surgeons to the Infirmary, to see the case with me. Together we were unable to introduce any, even the smallest, instrument into the bladder, though we overcame the stricture so far that the urine began to flow and give him relief. Little over a week and again he presented himself in the out-patients' room, this time to have the catheter passed without the slightest difficulty; and ever after, so long as he remained under my observation, the operation was easily performed.

I may add that, from first to last, I was never able to detect any enlargement of the prostate. The interesting points in this case are the rupture without any infiltration of the cellular tissue, and the rapidity and completeness with which the rent had healed so as to withstand every effort to empty his bladder made by a powerful, muscular man.

Can a Man have Syphilis Twice?

The *British Medical Journal* reports the following valuable remarks by Mr. Jonathan Hutchinson, on this interesting topic:—

The man whom we have just seen offers a remarkable example of the occurrence of a second chancre soon after the first. His second sore has been, as I have repeatedly demonstrated, characteristically indurated. He is quite candid, and makes no doubt that this sore was the result of contagion. Yet it is barely a year since he had his first chancre, and this was followed by an eruption, of which he had scarcely got clear when this second sore occurred. The case is proof that a man may have an indurated sore on the penis within a year of a former one, but it is not proof that he may have syphilis twice, for this patient has not as yet had any constitutional symptoms as the result of the last chancre. If,

however, you ask me for an answer to the general question, Can a man have true, complete syphilis twice? then I must reply clearly that he can. Such cases are rare—as rare, perhaps, as examples of second attacks of smallpox—but they do occur. I am at present attending a gentleman who has a terrible phagedenic chancre and rupial eruption, and who unquestionably had complete syphilis, chancre, sore-throat, and rash, seven years ago. I have also a second case under care, very much milder, but illustrating exactly the same fact, with almost precisely similar dates. Second chancres are, however, far more common than second attacks of constitutional syphilis. Many of them are the result of fresh contagion, but seem to have no power to produce constitutional symptoms; but others are not from contagion at all, but form in connection with a taint still remaining from the first attack. It is a most important fact that indurations may form in the penis, in every respect exactly like Hunterian chancres, not distinguishable in any way, and yet they may be merely recurred sores, and the products of constitutional taint. I have seen this over and over again; and M. Alfred Fournier, of the St. Louis Hospital, has written a very instructive paper on this form of sore. In the case of our patient, it is obviously impossible to say, after the statement which I have just made, whether or not his present sore is the result of fresh contagion. It may simply be a relapse, or it may be a gumma. He, however, confesses to exposure; and, as the sore followed in due course, it is probably true that he was afresh inoculated. Second attacks of syphilis are sometimes, as in the case just mentioned, very severe. The same has, I believe, been occasionally noted in recurred attacks of variola. As a rule, however, they are mild, or even abortive. Third attacks may even occur; and so may, as we are told, third attacks of smallpox. We must explain such facts, I expect, by reference to individual peculiarity and idiosyncracy, but it is important that they should be known. The belief that syphilis can occur but once in a lifetime is very widely spread among a certain class of the public. I have watched with amusement the change in expression in many a young gentleman's face when he got my reply to his smiling suggestion—"A man cannot, I suppose, have the disease a second time?"

Case of Incised Wound of the Skull; Trephining; Recovery.

Dr. Edward Cotterell reports the following interesting case in the London *Lancet*:—

The patient, aged twenty-one, was thrown from his dog cart, striking his head on a pile of stones. He was seen about three-quarters of an hour after the accident, when he was found, totally unconscious, and suffering from concussion, with some signs of compression. Upon examining his head, I found an incised wound of the scalp in the left temporal region, about two inches and a half long from before back, and on introducing the finger there could be felt an incised wound of the skull about one inch long.

I determined that trephining ought to be done, as there was undoubtedly depression of the inner table of the skull. I performed the operation at once, and on raising the circle of bone cut by the trephine, a loose piece of bone, an inch long and half an inch wide, consisting of the inner table, was seen lying on the dura mater. This was easily taken away through the trephine hole, and consciousness was almost immediately restored. The wound was left quite open, a piece of lint dipped in carbolic lotion being placed over it. The next morning an ice bag was applied to the head and five grains of calomel put on the tongue; later in the day a copious enema was given, with good result. The following is a record of the temperature and pulse: July 10th, 11 A.M., temperature 99°, pulse 60; 3 P.M., temperature 101.-2°; 7 P.M., temperature 100.7°, pulse 64; 11 P.M., temperature 101.2°. July 11th, 3 A.M., temperature 101°; 7 A.M., temperature 100.7; 11 A.M., temperature 100.8°; pulse 64; 3 P.M., temperature 99.8°; 7 P.M., temperature 100°; 11 P.M., temperature 100.6°; July 12th, 3 A.M., temperature 99°; 7 A.M., temperature 98.6°; 11 A.M., temperature 99.2°; pulse 60; 3 P.M., temperature 98.4°; 7 P.M., temperature 98°; pulse 48; 11 P.M., temperature 98.4°. July 13th, 3 A.M., temperature 98°; 7 A.M., temperature 98°; 11 A.M., temperature 98.6; pulse 56; 3 P.M., temperature 98.2°; 7 P.M., temperature 98.2°; 11 P M. 99°. Temperature ever since has remained perfectly normal.

July 11th. Patient had a rather restless night, but toward morning slept well. In the afternoon slept well. July 12th. On visiting the patient this evening the pulse was found to be only 48, very soft and compressible. The whole condition of the patient indicated profound weakness. A mixture was prescribed containing some carbonate of ammonia and chloroform, which appears to have acted very well, as the pulse the next morning rose to 56, and the day after to 64.

The wound healed by granulation, and was perfectly closed by August 7th, one month after receipt of injury. As will be seen, the patient never had a bad symptom after the operation, a result very seldom seen in these serious head injuries. On October 1st, after a holiday at the seaside, the patient resumed his business, and now does not seem any worse for his accident, except that he suffers occasionally from neuralgic pains at the seat of injury.

Wound of Left Lung—An Extraordinary Case.

Dr. L. E. Homles reports the following remarkable case in the London *Lancet*. A miner, aged 31 years, was standing at the bottom of a mining shaft 225 feet deep, when a drill, three feet one inch long, one inch and a quarter in diameter at the bit, and weighing eight and a half pounds, fell from the top. The patient was standing with his shoulders slightly dropped forward. The bit of the drill struck him between the superior angle of the left scapula and the spine, about two inches from the latter, passing downward and forward near the left border of the heart, and emerging at a point on a line with the left nipple and six inches from the centre of the sternum, fracturing the sixth rib, making a wound eight and a half inches in length. The drill passed nearly through, the head seeming to

the man to remain in the region of the left armpit; the point emerging struck the ground, bringing the man to the ground, upon his face. The patient called upon one of the men standing near him to assist in drawing out the head of the drill, and both pulling together succeeded in doing so. The head was much battered, and must have torn the lung and flesh considerably in passing through.

On entering the hospital the patient was bleeding freely, and in a fainting condition. Air, at each expiration, passed with a gush of blood from both ends of the wound. Hæmostatics, consisting of gallic acid and ergot, with stimulants, were freely administered, and the opening temporarily sealed. The bleeding ceased rapidly, but the patient recovered slowly from the shock. Sixteen days after the injury he was able to walk about. He remained in the hospital eight weeks, when he considered himself sufficiently recovered to go to his private boarding house to remain. The wound, or wounds, for it had two open ends, began to discharge matter on the fourth or fifth day, which was very offensive, and became very abundant. For three or four days, once a day, injections of carbolic acid (ten drops to the ounce) were made through the track of the wound, with a common Davidson's syringe. These, feeling disagreeable to the patient, were discontinued, and simple dressings used once or twice daily. The offensive character of the pus soon changed, though the abundance continued for several weeks. The lung has shrunken to about two-thirds its natural size. The respiration at the time of leaving the hospital was 28, and the pulse 90. The wounds ceased to discharge fifty-one days after the accident, and closed, except the lower one, which, with no perceptible opening, merely moistens the dressing during the night. Since leaving the hospital the patient has gained much flesh, and says he feels nearly as strong as ever. There was never any marked pleurisy, and no great amount of fever at any time during his stay in the hospital.

Uræmic Convulsions Treated by Vapor Baths and Chloral—Recovery.

Dr. A. B. Keely reports this interesting case in the *Lancet*. The patient, a lady, aged thirty-seven, thought she was suffering from a bilious attack. Examination revealed the following symptoms: Suppression of urine, with intense headache, nausea and constant vomiting, frequent pulse, and hot, dry skin. She had not passed water for a week. Bowels very constipated. She was ordered a mixture of acetate of potash, spirit of nitrous ether, chloric ether, and water, to be taken every four hours. He also ordered a vapor bath by means of a spirit lamp placed under a cane chair, a blanket being over the patient and a couple of aperient pills, containing colocynth and blue mass, at bedtime. By the next day, neither aperient nor diuretic had acted. The intervals between the diuretic were lessened and the baths given every three hours. Regular vapor baths were subsequently resorted to, because the patient was unable to get out of bed. After the first one, copious diaphoresis occurred, but no urine was voided. The next day uræmic convulsions set in and continued, throughout the day, to grow more and more severe, until on the subsequent morning they were so violent as to render the vapor baths impossible. She was then given one drachm of syrup of chloral and five grains of iodide of potassium in one ounce of water, every three hours. After the first dose the convulsions ceased. The chloral was therefore stopped, but the iodide was continued. Half a drachm of compound jalap powder had no effect on the bowels. This dose was repeated four times, but did not act until an enema was given, and then only slightly. She now voided about one half pint of urine, the first in fourteen days. Vapor baths were now given every three hours, each one acting well on the skin. She was nourished with milk and beef tea. One grain of elaterium in a little sugar produced one good evacuation from the bowels. From this time out the patient passed water two or three times daily. The urine contained two-thirds albumen. She now complained of great pain in the loins, over the kidneys. Hot fomentations gave her great relief, and she passed a considerable quantity of water during the next twelve hours. The baths were continued for three weeks, being gradually reduced in frequency during the day: the iodide was continued for the same length of time. At the end of three weeks from the beginning of her illness the patient was able to be moved to a sofa. Her bowels acted daily, without any aperient. During convalescence meat and fish were given on alternate days, together with such vegetables as marrow and beans. About a quart of milk was taken daily. At the end of a month the patient was able to walk about, when she was removed to the country, where she gained strength rapidly. When the solid food was begun, fifteen minim doses of the perchloride of iron were substituted for the iodide. The attack was attributed to a cold.

Pathology of Hydrophobia.

At a recent meeting of the Microscopical Section of the Manchester Medical Society, reported in the *British Medical Journal*, Mr. E. H. Howlett exhibited some sections of the spinal cord from a case of hydrophobia. After briefly alluding to a series of cases of hydrophobia, in which four out of five persons bitten by the same rabid dog had died with well marked symptoms, he proceeded to discuss the pathology of the disease by stating that, for a long time, the virus had been known to exist in the saliva of rabid animals. Microscopical examination of saliva would naturally demonstrate the presence of numerous organisms, but such a result was to be expected even in the saliva of healthy individuals. With the view of ascertaining whether any particular form of disease could be discovered in the salivary glands themselves or in the blood, the following experiment was performed. Within an hour and a half of death, portions of the submaxillary, parotid, and sublingual glands, with Stenson's duct, were dropped into test-tubes containing a fine turnip infusion; also the same organs were placed in some dry test-tubes, and the whole series placed in an incubator, where they were kept for several weeks. These

test-tubes were exhibited to the Society (eight months after the commencement of the experiment), and it was seen that the solutions remained perfectly bright and clear; and, of the dry preparations, with the exception of the one containing parotid gland, no change beyond the drying up of the tissue occurred. From these results, it was concluded that no organism existed in the salivary glands or blood in hydrophobia which was capable of causing any form of fermentative change. Microscopical examination of the other organs failed to demonstrate the presence of any micro-organism.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Transactions of the Medical Association of Georgia, Thirty-second Annual Session, 1881, comes to us from the Secretary, A. Sibley Campbell, M.D., as a handsome cloth-bound volume, of three hundred pages, well illustrated and containing much of interest.

——Photographic Illustrations of Cutaneous Syphilis. By George Henry Fox, A.M., M.D. New York: E. B. Treat, No. 757 Broadway. We have before us parts 10, 11, 12, of this most admirable series. The price is two dollars per part. They are well worth it, to all who can afford it. The illustrations are so realistic that they almost make one shudder; they remind us of the impressions made upon entering the chamber of criminals in Madame Tussaud's wax works establishment in London, where the representations of noted criminals are so natural and life-like as to be startling. These illustrations are so *beautifully* natural as to be horribly perfect.

——We have received from Messrs. G. P. Putnam's Sons, publishers, of New York, a circular, to the effect that the rumored sale or discontinuance of the *Journal of Nervous and Mental Diseases* has no foundation in fact. The journal will be published by them hereafter, as it has been in the past, under the editorial management of Dr. W. J. Morton, of New York City, assisted by Drs. Jewell (the former editor) Seguin, Hammond, Bannister, Clymer and Ott.

BOOK NOTICES.

Opium Smoking in America and China. By H. H. Kane, M.D., author of "Drugs that Enslave," etc. pp. 156. New York: G. P. Putnam's Sons, 1882. For sale in Philadelphia, by J. B. Lippincott & Co.

Dr. Kane possesses unusual facilities for familiarizing himself with the questions about which he treats. He is connected with a home for the cure of the opium habit, and has studied and written much on the subject. The author is a pleasing and instructive writer, and his book contains much that will be of interest to the physician. This habit of using opium as an intoxicant is, according to Dr. Kane, becoming frightfully prevalent in our country, so that in a few years it will constitute one of the evils with which sociologists will be compelled to make warfare. It behooves all who may directly or indirectly have any influence over the private life of others to read this book, that they may understand and be prepared to intelligently grapple with this growing social evil.

Illustrations of Dissections, in a Series of Original Colored Plates, the size of Life, representing the Dissection of the Human Body. By George Viner Ellis, Professor of Anatomy in University College, London, and G. H. Ford, Esq. pp. 233. New York: William Wood & Co. 1882.

This volume constitutes the January number of Wood's Library. It is one of the most interesting and valuable books that have been issued in this library, containing, as it does, a very large number of colored plates, reduced, on a uniform scale, from drawings from nature. An explanatory text accompanies each plate. This volume is well calculated to refresh the knowledge of anatomy acquired in the dissecting-room, and will be a useful addition to every physician's library.

Fistula, Hæmorrhoids, Painful Ulcers, Stricture, Prolapsus, and other diseases of the Rectum; their Diagnosis and Treatment. By William Allingham, Fellow of the Royal College of Surgeons of England, Surgeon to St. Mark's Hospital for Fistula and other Diseases of the Rectum, etc., etc. Fourth Edition. pp. 492. Price, $3.00. Philadelphia: Presley Blakiston, 1882.

This a valuable and practical work. Its practical nature is guaranteed by the opportunities for observation enjoyed by its author. Its value and popularity are attested by the sale of three large editions, and by its translation into French, Italian, Spanish and Russian. The literary tendency of the times is toward the production of volumes on special diseases and accidents, and it is necessary that this should be so. Since, in this age of unparalleled progress in everything, medicine and surgery participate, and hold their own, the accumulating information concerning different deranged conditions is becoming so extensive that it would be impossible for any text-book, however large and cumbersome, to contain all that is important and interesting. Therefore, these special volumes, when emanating from competent authors, are to be wel-

comed, and the one under consideration, we can truthfully say, possesses much interest for the general practitioner. It is well illustrated.

A Treatise on Human Physiology; designed for the use of Students and Practitioners of Medicine. By John C. Dalton, M.D., Professor of Physiology, and Hygiene in the College of Physicians and Surgeons, New York. pp. 792. Philaphia: Henry C. Lea's Son & Co. 1882.

It is only necessary to announce this new (seventh) edition of this standard work on Physiology, and to state that it has been thoroughly revised, so as to bring it up to the standard of the present time.

Diseases of Women, including their Pathology, Causation, Symptoms, Diagnosis and Treatment. A Manual for Students and Practitioners. By Arthur W. Edis, M.D. Lond., F.R.C.P., M.R.C.S., Assistant Obstetric Physician to the Middlesex Hospital, etc., etc. pp. 576. Philadelphia: Henry C. Lea's Son & Co. 1882.

We have so many good books on the diseases of women, that it seems almost needless to prepare any more for some time, until we have made such advances in this branch of medicine as to make the present volumes old and behind the age. Still, when a man who possesses opportunities for observation prepares a book, we may always be sure that we will find something instructive and interesting in it. The author of this work has had such opportunities, and we can commend his book to all physicians who have not on their shelves a recent standard work on diseases of women. The work is well illustrated.

The Sympathetic Diseases of the Eye. By Ludwig Mauthner, M.D., Royal Professor in the University of Vienna. Translated from the German by Warren Webster, M.D., Surgeon U. S. Army, and James A. Spalding, M.D., Member of the American Ophthalmological Society, etc. pp. 220. New York: William Wood & Co., 1881.

This is a valuable work, intended to bring familiarly before the general practitioner the important knowledge concerning sympathetic diseases of the eye. It is written in an interesting and intelligible style, and with a degree of force that carries conviction. When an author of eminence announces, in italicized words, "*When the other eye is in a state of irritation, an eye which still possesses vision must be unhesitatingly sacrificed,* success is too certain, and too much is at stake for the oculist to hesitate," we are led to conclude that he must have had great experience, else his edicts would be less positive. This will be found a very useful book by the general practitioner.

The International Encyclopædia of Surgery; a Systematic Treatise on the Theory and Practice of Surgery. By authors of various nations. Edited by John Ashhurst, Jr., M.D. Six vols. Vol. I, pp. 717. New York: Wm. Wood & Co.

This is a very valuable volume, prepared by gentlemen of universal reputation. The section on "Disturbances of Nutrition; the Pathology of Inflammation," is by S. Stricker, M.D., Professor of Experimental and General Pathology in the University of Vienna. "Inflammation," by Professor W. H. Van Buren, of New York. "Erysipelas," by Professor Alfred Stillé, of Philadelphia. "Pyæmia and Allied Conditions," by Francis Delafield, M.D., of New York. "Hydrophobia and Rabies; Glanders; Malignant Pustule," by William S. Forbes, M.D., Demonstrator of Anatomy, Jefferson Medical College, Philadelphia. "Scrofula and Tubercle," by Henry Trentham Butlin, Demonstrator of Surgery at St. Bartholomew's Hospital, London. "Rachitis," by J. Lewis Smith, M.D., Clinical Professor of Diseases of Children in Bellevue Medical College. "Scurvy," by Phillip S. Wales, M.D., Surgeon General U. S. Navy. "The Reciprocal Effects of Constitutional Conditions and Injuries," by A. Verneuil, M.D., Professor of Clinical Surgery in the Faculty of Medicine, Paris. "General Principles of Surgical Diagnosis," by Professor D. Hayes Agnew. "Shock," by C. W. Mansell Moullin, M.D., Surgical Registrar to the London Hospital. "Traumatic Delirium and Delirium Tremens," by William Hunt, M.D., of Philadelphia. "Anæsthetics and Anæsthesia," by Professor Henry M. Lyman, of Chicago. "Operative Surgery in General," by John H. Brinton, M.D., Lecturer on Operative Surgery in Jefferson Medical College, Philadelphia. "Minor Surgery," by Charles T. Hunter, M.D., Demonstrator of Anatomy in the University of Pennsylvania. "Plastic Surgery," by Christopher Johnston, M.D., Emeritus Professor of Surgery in the University of Maryland. "Amputations," by John Ashhurst, Jr., M.D., Professor of Clinical Surgery in the University of Pennsylvania. This synopsis of contents is the best way to notice this volume. The reader can, from it, form an idea of the scope and nature of the work. In these progressive days, encyclopædias are necessary to those who would desire to keep abreast of the times, and more particularly to those physicians who, living far away from large cities, are thereby denied the privileges of hospital instruction.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

ETHICS COMMON TO PHYSICIANS AND PHARMACISTS.

It is of unquestioned importance, both to pharmacists and physicians, that the relations existing between them should be amicable and honorable. There can be no doubt but that all the worthy members of both these avocations earnestly desire such to be the case. Grievances have long existed which are not yet settled, and it requires a careful consideration of the equities of both sides to arrange entirely harmonious relations. The physician must not insist on steps which, if carried into effect, would depreciate the business interests of the druggist; and the latter ought not to insist on privileges which are detrimental to the physician. Both should recognize that the public and the general mass of society have claims which should not be overlooked.

These themes have been weighed conscientiously, by prominent members of both professions, and, as one of the results, we may name the unanimous adoption of a Code of Ethics by the Pennsylvania Pharmaceutical Association, at its last annual meeting, in June. Several of its sections pertain directly to the relations of pharmacists to physicians, and we believe that readers both in and out of this State will be glad to peruse them, and we, therefore, quote them, from the *American Journal of Pharmacy*:—

II. Although not a legitimate part of our business, custom and the necessity of the times warrant us in keeping the proprietary medicines of the day; yet, out of regard to the medical profession, and for the protection of the public, we earnestly recommend all pharmacists, when called upon for an opinion of their merits, to discourage their use, and neither to advertise nor permit their names to be used in advertising such medicines.

III. Recognizing the value of alcohol as a therapeutic agent, and the propriety of its being dispensed as such by pharmacists, yet deploring the wide-spread evil resulting from its indiscriminate use in its hundred insidious forms, we condemn any attempt to make it a prominent feature of our business, as unprofessional; and we denounce the loose practice of allowing it to be used on the premises, in any shape, as a beverage, as degrading, and we urge upon pharmacists the duty of exercising a conscientious care in dispensing a drug liable to such dangerous abuse.

IV. We discountenance all secret formulas between physicians and pharmacists, and consider it our duty to communicate such to one another, when requested.

V. We distinctly repudiate the practice of allowing physicians a percentage on their prescriptions, as derogatory to both professions.

VI. We will endeavor, as far as it lies in our power, to refrain from compromising the professional reputation of physicians, and we expect the same comity from them.

VII. Since the professional training of the pharmacist does not include those branches which enable the physician to diagnose and treat disease, we should in all practicable cases decline to give medical advice, and refer the applicant to a regular practitioner.

The remaining sections pertain to matters which have less interest for the medical profession, and we omit them.

There are two points in this Code to which we would particularly call the attention of physicians, because, if they are not carried out, it is the physicians who will be wholly to blame. These are the practice of secret formulas between physicians and druggists, and the acceptance by physicians of percentages from druggists. It is vain for some to say that these practices are unknown, or are very unusual. We know to the contrary, and we could name members of the medical profession in this city, of a certain degree of eminence, who do not hesitate to stoop to both these practices. They would not dare

to come forward and defend them, but they continue to make money out of them.

It would be well, and we suggest it here, that the members of every regular medical society individually sign a resolution declaring such practices dishonorable and denouncing those who persist in them. We have grave doubts whether all of the members of the medical societies in this city would sign such a paper; but if they do not, the reason would be obvious, and they should be censured. If we want the druggists to act according to the code of honor, why this tergiversation on our part? Why hesitate to put ourselves square on the record?

We predict, however, that although this course is so clear and open, it will not be taken. There are influences of too strong a kind against it; and the time has not yet come when even men holding official positions in the profession in this city are free from the questionable methods of financial "kiting" we have named.

INOCULATION.

In these days of unparalleled progress in everything, suggestions of all kinds are admissible, since nothing seems impossible of achievement. Our science fully holds its own in this march of progression, and is making rapid strides toward a firm scientific basis.

It becomes the duty of medical journalists to suggest to original medical investigators hitherto unexplored paths, and to encourage them to work in these directions.

Since it has been vouchsafed to us to discover a method by which the ravages of smallpox may be stayed, why, we would ask, cannot further investigation enable us to extend this protective immunity to all the contagious diseases. It is generally conceded that vaccination confers immunity from smallpox by destroying or altering some of the conditions of the blood necessary for the development of the disease. Why cannot these same effects be produced in connection with the other zymotic diseases. If, let us suppose, a person in health were to receive into the body some of the poison of typhoid fever, measles, scarlet fever, or diphtheria, might it not be that this poison could, without producing a dangerous disease, so modify and alter or destroy the conditions or elements upon which or from which this disease in its more virlulent form is developed as to render the subsequent occurrence of a severe and fatal attack as rare as in the case of smallpox. Might not this poison, introduced into a system not yet ripe for it, where it would find the conditions necessary for the full development of the particular disease, yet have such an effect on these elements or conditions, whatever they may be, that they would never after be capable of uniting with the poison and producing the disease in its aggravated form. These few words are given as a hint; we would invite discussion on the subject.

Notes and Comments.

Physiological Effects of Prolonged Bathing.

In an investigation on the above subject, published in *Paris Médical*, for December, and giving a very accurate account of the effects which baths produce on the system, according to their duration and temperature, Dr. Théry has arrived at a number of conclusions which are both interesting and true. He says: A bath at 97° Fahrenheit is without effect on the circulation. All baths below 97° reduce the action of the heart. The beats, however, acquire greater energy. The pulse retains perfect regularity. Circulation is not reduced in direct ratio with the temperature of the water, but it is influenced by the duration of the bath.

When baths at 75° or less are prolonged for an hour, arterial pulsation continues decreasing after exit from the water. Baths at or below the temperature of the body quicken circulation. This acceleration is proportional to the temperature of the water. The pulse is irregular and the heart fluttering.

Baths between 97° and 99° are without effect on animal heat. Baths below 97° reduce the temperature of the body. Baths between 92° and 97° cause a loss of 0.97° to 1.46°; this reduction is obtained within half an hour; after this the thermometer remains stationary, even should the bath be continued for two hours.

In baths at 86° or under the fall in temperature is more gradual; it is in proportion to the duration of the bath.

The first effect of a bath at 72° or less causes

a slight elevation of temperature. The fall in temperature obtained by means of a half hour bath at 93° is almost equal to that produced by a bath at 72° continued for an hour. After a bath above 82°, continued for an hour or two, temperature has an upward tendency, although for the following twelve hours it remains from 0.5° to 1° below what it was before the bath. After a bath under 81°, the thermometer continues falling during the next twenty minutes following exit. During the twelve hours following a prolonged bath, at from 64° to 81°, the thermometer indicates a reduction of 1° to 1.50° from the initial temperature.

All baths at or above the temperature of the body produce a rise in central temperature. The rise, in proportion to the temperature of the water, is progressive. A bath at 108°, continued for nineteen minutes, raises the temperature of the body to 104°. A bath at 68° progressively raised to 95° produces a fall in temperature. A bath at 97° gradually reduced to 75° causes, as a first effect, a fall in temperature; but subsequently, in proportion as the temperature of the bath decreases, that of the body rises. It is only between 91° and 97° that baths can be continued for a long time without causing suffering.

In water, the sensation of cold acts by reflex action, first on the smooth muscular fibres, and later on the striated.

Hot baths predispose to syncope; they are followed by profuse perspiration.

All baths, when long continued, are debilitating.

Elongation of the Lingual Nerve.

At a meeting of the Société de Chirurgie, reported in *Le Progrés Médical*, M. Ledentu presented a woman upon whom he had performed an elongation of the lingual nerve, in a case of tic douloureux of the face and epileptiform neuralgia of five years' standing. Having no positive data as to the tractile force that should be applied, and mindful of the accidents which have sometimes attended the elongation of cranial nerves, M. Ledentu, after exposing the nerve, took it up on a hook and carefully raised it only about four lines above the buccal floor; he then allowed it to drop in the wound, where it assumed an S shape. Immediate relief followed, and for thirteen days past the patient had not experienced any of her former excruciating pains. Will this condition continue? In the debate that ensued M. Auger asked if the lingual nerve had a red and inflamed appearance, that having been his own experience in a case in which he had lately operated. M. Ledentu replied that the nerve was normal, both in form and color. M. Polaillon believed the cure would be a permanent one; he had performed a similar operation, some three months before, and the patient was doing well. M. Nicaise spoke of the dangers incident to elongations of cranial nerves. In conclusion, M. Tillaux mentioned a case of a purulent flow of the eye in a patient upon whom he had performed a resection of the upper maxillary nerve. This accident, he believed, was due to the nerve section. The patient, for the last four years, had been doing remarkably well.

The Treatment of Scarlatina.

In an article published in *Le Concours Médical*, Dr. Paul Gerne, makes the following suggestions for the treatment of scarlatina. He says:—

We shall not here attempt to decide on the prophylactic and curative merits of belladonna; we will only say that experiments made for that purpose have given widely divergent results. If it is desired to use this remedy, the following is a good formula:—

℞. Ext. belladonna, 0.15 c. = gr.ii½
Distilled water, 30 gm. = ʒ viiss
Alcohol, rectified, 1 " = ♏xv. M.

Of this mixture, give as many drops, morning and evening, as there are years in the patient's age.

In regular and normal forms of the disease the treatment should be purely hygienic; the patient must be kept in bed, in a room having a temperature of from 64° to 68°, F.

The patient should not be surfeited with warm drinks; he may have reasonable quantities of lemonade, to which wine can be added, when there are symptoms of weakness.

Until the period of desquamation is reached, the food should consist of broth, unless otherwise specially indicated.

The infectious nature of the disease warrants the use, as recommended by Scott, of an aqueous solution of sulpho-phenate of soda, in doses of from 0.30 centigr. to 1 gram (= grs. ivss—xv.) In irregular forms, the predominating symptoms, will, of course, indicate the particular measures that should be adopted. The hyperthermia in those ataxic forms rapidly accompanied by serious nervous, comatose, convulsive, or dyspnœic symptoms, is successfully checked by cold lotions and affusions, and in very severe cases, cold baths may even be given.

As an anti-thermic remedy, we use sulphate of quinine; but salicylate of soda should never be

displayed, because it might superinduce nephritis, which is always imminent, or aggravate it, if already present.

In syncopal forms, wine, alcohol, cinchona and digitalis, are to be exhibited.

In gastro-intestinal forms (complicated from the start by incoercible vomiting and profuse and persistent diarrhœa), opiates are to be used, also Seltzer water, and ice in small pieces be frequently given by the mouth.

We will conclude with a few remarks on the experiments made by Dr. Demme, of Berne, with *pilocarpine*. According to him, in scarlatina, when the exanthema is retarded, excellent results may be derived from the diaphoretic effects of pilocarpine, and the serious nervous symptoms usually occurring in such cases may be averted. But this medication, even when displayed at the outset of the eruptive period, is powerless in preventing renal complications. By stimulating diaphoresis, it may lessen the gravity of the uræmic symptoms, which frequently happen during the period of decrease. But the use of this remedy requires the greatest caution ; its depressive action upon the heart, when given in rather high doses, predisposes to collapse, and this danger is almost constantly impending, after the use, during a few days, of hypodermic injections of one-sixth of a grain of chlorhydrate of pilocarpine. Dr. Demme, therefore, recommends that this remedy should only be administered in limited doses, and that its use be preceded by cordials, generous wines, or strong infusions of coffee or tea.

The Purity of Chloroform.

While even perfect purity in chloroform is not an absolute safeguard against accidents, it is of sufficient importance to deserve the attention of every surgeon ; hence the following easy tests, recommended by Professor Regnauld, and published in *Le Progrés Médical*, will no doubt be read with interest.

1st. Chloroform should have an agreeable odor.

2d. It should not redden blue litmus paper.

3d. Added to a solution of nitrate of silver, it should neither give a precipitate, nor even cause cloudiness.

4th. It should not become colored, when brought to the boiling point, along with a concentrated solution of caustic potash.

5th. Sulphuric acid should not blacken when brought in contact with chloroform.

The above tests are not difficult; besides these, there are others, such as determining the *specific gravity* and the *boiling point*, which, however, are more within the province of a chemist; but no chloroform should ever be used for anæsthetic purposes which does not comply with the above requirements.

Chloroform, even when perfectly pure, is liable to sudden changes. Exposure to light, an imperfect cork stopper, or a but partially filled bottle, are conditions which may affect its purity; hence it should be occasionally tested, especially before using. Dr. Yvon, is of opinion that the sulphuric acid test is not fully reliable; on the other hand, as caustic alkalies are used for the purpose of rectifying chloroform, there may be circumstances when the absence of coloration with an alkaline solution is not positive evidence of purity; he, therefore, recommends, as a far more delicate test, the combined action of permanganate of potash and a caustic alkali.

As a reagent, he uses a solution of:—

℞.	Permanganate of potash,	gr. xv
	Caustic potash,	℥ iiss
	Distilled water,	℥ viiss.

This solution is of a handsome violet-red color, and when in contact with *pure chloroform*, remains unchanged. But if the chloroform has been *imperfectly* rectified, the solution is acted upon, and its color gradually changes to green.

To be successful, this test requires considerable nicety.

Syphilis from Epidermic Grafting.

In the *Progrés Médical*, we notice that at a meeting of the Société Médical des Hôpitaux, M. Fèréol reported the following, case observed by M. Debel: A man, 49 years old, was under treatment for gangrenous erysipelas, and extensive ulcerations, the cicatrization of which was progressing with great difficulty. M. Debel applied 45 dermo epidermic grafts on the external half of the sore. 33 of these were successful. A few days later, a number of other grafts, taken from different individuals, were applied to the internal half of the ulceration. Not long after cicatrization was progressing favorably, but there appeared on the sore an ulceration of the size of a twenty-cent piece, having a grayish-white color, which went on increasing, and presently overspread the untire ulceration.

After a time, mucous patches appeared in the mouth, and roseola over the skin. The presence of syphilis was unmistakable. Upon investigation, the attending physician found that the patient's son, from whom some of the grafts had been taken, was suffering from syphilis. In this case specific treatment was found useful, and under its influence cicatrization of the sore was successfully accomplished.

A Remarkable Wound of the Brain.

The *Lancet* for January, 1882, reports the following wonderful case, which was presented to the Société de Médicine de Paris by M. Dubrisay. A man determined on suicide held in his left hand a dagger, about 3½ inches long and ⅓ of an inch wide, and placing the point against his skull, struck it several blows with a mallet, believing that he would fall dead at the first blow. To his surprise he felt no pain, and observed no phenomena. He struck the dagger, in all, about a dozen times. When seen, the handle of the dagger was projecting from the skull at the junction of the posterior and middle third, a little to the right of the middle line, and in a transverse position. All of the blade except one-third of an inch was imbedded. The most strenuous efforts were made to remove the dagger, without avail, so tightly was it held in position. Neither did these efforts cause any pain. The man then *walked* to a coppersmith's, where he was fastened to rings fixed in the ground, and by strong pincers the handle of the dagger was fastened to a chain, which was placed over a cylinder turned by steam power. At the second turn the dagger came out. The patient, during all this time, suffered no pain or inconvenience, and in a few minutes *walked* to a hospital, where he remained in bed for ten days, but without fever or pain. He then returned to his work, and the wound gradually healed. By driving the dagger into the head of a cadaver in the same situation and to the same depth, M. Dubrisay found that, without injuring the superior longitudinal sinus, it had passed into the cerebral substance, just behind the ascending parietal convolutions, and thus behind the motor zone; the point had not reached the base.

Diabetes Insipidus Treated by Electricity.

Dr. C. P. B. Clubbe speaks of this method of treating diabetes, in the London *Lancet*. He reports the case of a woman who passed from eighteen to twenty pints of urine per diem. It was light colored, very low specific gravity, and contained no sugar. All the drugs recommended for diabetes were tried, without result. She was then ordered electricity (faradaism), to be applied over the region of her kidneys every day, for about twenty minutes at a time. Under this treatment the daily average amount of urine diminished during six weeks, from 237 to 113 ounces; where it remained nearly stationary, varying but little. At the end of the twentieth week all treatment was discontinued. Six months afterwards she was in about the same condition as when treatment was stopped. Dr. Clubbe thinks this result would justify the more extended use of this treatment in diabetes insipidus.

Traumatic Tetanus—Recovery.

Dr. H. J. Lloyd reports the following case of traumatic tetanus which terminated in recovery, in the London *Lancet*. The patient, six years old, had his hand lacerated. The wounds healed satisfactorily. Two weeks subsequently tetanic symptoms set in. The disease was well marked and characteristic in every symptom. The treatment adopted was to open the bowels with a brisk purgative of calomel and scammony, application of ice to the spine, and after the bowels were well moved, three grains of hydrate of chloral were given every hour, until sleep was produced, then every four hours, as long as rigidity of the muscles continued. The patient was kept up with beef tea and mutton broth. The bowels were kept open with the purgative powder occasionally. In three days the spasms gradually disappeared, and the patient was quite well in a month.

A New Bougie.

In the *Transactions* of the Mississippi Medical Association, Dr. Daniel reports two cases where, after having failed to pass the smallest bougie through a stricture of the urethra, he resorted to a small fiddle string, which readily passed the obstruction. After remaining in situ a few minutes, it was found, upon withdrawal, to have swollen to nearly double its original size. A larger string was passed, and after remaining ten or fifteen minutes, was withdrawn, when the urethra was found to be sufficiently dilated to allow the passage of a No. 4 bougie.

A Grain of Corn Discharged Through the Chest.

Dr. S. Wilks reported an interesting case to the Pathological Society of London (London *Lancet*). The patient (a child) was suffering from an abscess over the left supra-scapular region, the skin over it feeling boggy. A grooved needle was passed in, and a puff of air and pus came out. Free suppuration occurred, and after a time a grain of corn was passed, and then the wound healed. No other cause being found for its presence, it seemed that the grain of corn must have been inspired into the lung.

Chlorosis Treated by Chlorhydric Acid.

In the *Centralblatt für die Med. Wissensch.*, Dr. Zander contests the somewhat generally accepted opinion, that chlorosis is developed by a deficiency of iron in the alimentation. He believes that food always contains a sufficient quantity of iron, but its absorption is often imperfect, because the digestive juices are of faulty composition, and more especially, owing to the fact that the gastric juice lacks its necessary proportion of chlorhydric acid. As an attending consequence, the albuminoid principles are but imperfectly digested, hence, languid nutrition also follows.

Acting upon this theory, Dr. Zander has treated chlorosis by the aid of chlorhydric acid, giving it according to the following formula:—

℞. Chlorhydric acid, f℥ ss–j
Distilled water, f℥ vj. M.
One or two tablespoonfuls after each meal.

In very stubborn cases, he has added artificial pepsine to the chlorhydric acid. The results have always proved highly satisfactory.

Ergotine in Pharyngitis.

The *Revue Mensuelle de Laryngologie*, indicates a therapeutic method which may give good results in cases of chronic pharyngitis, complicated by exaggerated enlargement of the pharyngeal veins, and muco-purulent secretions. It advises the use of—

℞. Ergotine, gr. xv
Tincture of iodine, ℥j
Glycerine, f℥ viiss. M.

To be liberally applied, twice a day, on the pharynx, by means of a brush.

Special Reports.

NO. III—INFECTIOUS DISEASES (Continued.)

In examining the literature of the past year, we fail to find any progress worthy of special note in the domain of etiology and treatment of the infectious diseases, beyond those already recorded with reference to diphtheria. We have great reason to hope, and this hope is encouraged by the valuable researches and discoveries of M. Pasteur and of other workers in the same field, that the day is not far distant when we will possess accurate knowledge concerning the causative agency of the various infectious diseases.

It is from research in this direction that we must, in an especial manner, look for the grounds upon which to base a rational and successful therapeutic course. Clinical research has been and is, a very valuable aid to therapeutics; indeed, most of the existing knowledge we have to-day concerning the treatment of disease, has been derived solely from clinical observation. But, without desiring to detract from this valuable factor, we must recognize that it is very much like working in the dark, so far as discovering a specific for the poison of the infectious diseases. We all admit our inability to control, cut short, or abort a case of typhoid fever, of measles, of scarlet fever, and the like. We can only treat collateral symptoms as they may arise, support the patient and wait until the special poison has expended its force, the disease has run its course, and hope for a successful termination.

If some original investigator can exactly determine the nature of the special animal or vegetable growth which, when introduced into the system, is capable of giving rise to any of these zymotic diseases, a great step towards a special therapeutics of this disease has been made. If, then, he can produce this growth artificially, outside of the body, a great stride has been made, and he has, most likely, within his possession the necessary elements out of which to evolve a *specific* for this disease.

If, as we suppose, the development of the zymotic diseases is due to the presence and activity of some foreign living elements in the system, it would seem to be a rational conclusion that if the life of these foreign elements could be destroyed, the disease would not be developed, it could be aborted.

Therefore, when some investigator has succeeded in artificially developing the disease germs, he can take them into his chemical laboratory, and by repeated experiments may finally be enabled to decide upon some drug capable of destroying their vitality. It will then remain for extended clinical research to demonstrate whether or not this parasiticide will still retain its destructive power when it meets the organisms in the system, surrounded and influenced, as they must be, by the conditions they find therein.

This would seem to be the course indicated by which we may hope to ultimately discover some remedy through the potency of which we may be enabled to abort these diseases in their incipiency. We trust and pray that before many years have gone by we may have the extreme pleasure of recording some such results. The example set us by M. Pasteur is in the right direction, and it behooves some of our energetic American physicians to follow in his footsteps, and endeavor to

surpass him, so that this wonderful discovery may emanate from our wonderful country.

During the past year more attention has been given to the means of preventing the ravages of the infectious diseases, both by disseminating information touching on the prophylaxis and by public and concerted measures. The Contagious Diseases Act in Great Britain has been productive of very much good. Inspector ANNISS stated, in the London *Lancet*, that under the working of this act the ravages of infectious diseases had very much diminished. Formerly cases of smallpox and scarlet fever might exist in brothels, quite unknown to the authorities, and thus the infection might be communicated to a large number of persons. Under the present system such a case could not remain unnoticed by him on his visits, and he would order the brothel keepers at once to send the patient to the hospital, and to have the rooms properly disinfected; otherwise, he would take measures to have the house placed "*out of bounds*," that soldiers and sailors should receive strict orders not to enter it. Realizing, as we do, the importance of isolation in staying the ravages of infectious diseases, we are prepared to appreciate the wisdom of this provision of the act.

It is a matter of paramount importance that physicians should thoroughly realize and should instruct the public that the evil habit of suppressing the existence of infectious diseases, lest their known presence may injuriously affect the commerce of a locality, is very strongly calculated to favor the continuance and increase of these diseases. It is a wrong and fatal idea, and should be corrected. Realizing this point, the Sanitary Council of the Mississippi Valley passed the following resolution:—

Resolved, That this Council condemns all methods of suppression and secrecy with reference to information of contagious or infectious diseases; therefore it discountenances the use of *cipher* telegrams; but in the event of danger from such diseases at any point in the Mississippi Valley, it is the duty of the executive officer of the health organization of such place to fully and promptly advise the proper authorities at all threatened points.

This is a point that is entirely too much neglected. When we must realize that isolation is one of the most potent (and in many cases the most powerful) means of circumscribing infectious epidemics, we must admit and teach that it is the first duty and a most conscientious one, for all physicians, as well as the public press, to give full notoriety to any cases of infectious diseases that may exist in a locality, in order that the health authorities and the public may be roused from their lethargy and stirred into instituting proper and efficient isolative and disinfective measures.

From the *National Board of Health Bulletin*, we note that a sanitary examination of the city of Memphis, subsequent to the fearful epidemic of yellow fever which prevailed there in 1878, exhibited the following condition. The death rate for three years previous to 1878 was 35 per 1000; for the first yellow fever year 114 per 1000, and for the last 51 per 1000. Within the city limits were found six thousand sub surface cesspools in use. They were, in many instances, shallow holes, with no lining. Many of them were in dangerous proximity to dwelling rooms, some of them being actually excavated in the cellars of occupied dwellings. There were also a large number of disused but *full* vaults, the contents of which, in some cases, were entirely uncovered, while in the majority there was only a thin layer of ashes. Nearly all the cisterns and wells that supplied water to the inhabitants were situated sufficiently near to these vaults to be contaminated by their leakage. Is it any wonder that this terrible epidemic prevailed? Ought we not rather to be surprised that it spared any one? This terrible state of affairs was intelligently remedied, and as a result, Memphis has been comparatively free from disease.

The *Mississippi Valley Medical Monthly* gives some statistics that demonstrate more clearly than words how possible it is to limit the infectious diseases, and how beneficial have been the intelligent sanitary improvements carried out in Memphis. From them we learn that the decrease in deaths from zymotic diseases during 1881, as compared with 1880, was, in Memphis 0.73; in Cincinnati only 0.48; in Chicago 1.12; while in New York the increase was 2.06; in Brooklyn 1.65; and in Philadelphia 2.68. Philadelphia has of late years been a very dirty city.

During the first quarter of 1880, the death rate in Memphis from diarrhœal diseases was 1.19 per 1000; for the same period of 1881 it was 0.59, a decrease of fifty per cent. Many valuable lessons in the limitation of infectious diseases can be derived from the sad experience of disease stricken Memphis, and its subsequent restoration on sound sanitary principles; lessons that teach us that we have, to a great extent, in our hands the sure means of saving many lives annually that are now prematurely sacrificed on the altar of infection.

(To be Continued.)

CORRESPONDENCE.

Penetrating Gunshot Wound of Brain.

ED. MED. AND SURG. REPORTER:—

In your issue of January 28th, 1882, is an article from the Boston *Medical and Surgical Journal*, by Dr. J. Foster Bush, giving the details of a case of penetrating gunshot wound of the brain, so similar in locality and course of the ball, but so very different in effects to one that came under my care when a surgeon in the Confederate army, that I feel it is worthy of publicity.

Private J. B. C., of the Twelfth Tennessee Regiment of Confederate Volunteer Infantry, while on picket duty in front of our army, at Corinth, Miss., May, 1862, standing behind a tree, in the act of taking aim at one of the enemy, also on picket duty, head protruding, received a ball from what was supposed to be a Maynard rifle, of about forty calibre, one and one-half inches above the left eye. He said, "I fell, dropping my gun, very much stunned, but soon recovered enough to regain my gun, and with it and other equipage, walked to camp (distant two miles). Seated in a chair in front of my tent, I examined his wound, finding it located as above stated, with quite an amount of blood on and around the wound, coagulated, and with the coagulated blood was as much as a tablespoonful of brain; he seemed to be perfectly rational; said he had not lost very much blood; pulse and general appearance did not indicate that he had; did not complain of much pain; had neither paralysis, loss of sensation, nor aberration of vision. On examining the wound it was found to be large enough to admit the little finger to the second joint. The aperture in the skull was remarkably smooth, having but a few small spiculæ; the ball passed directly inward and backward (no other probe than the finger was used in the examination), but did not pass out, and consequently remained in the cerebral cavity. The wound was cleansed and dressed with a wet compress and bandage, and he sent to the hospital, three miles in the rear, in the town of Corinth. I learned that he had high fever on the third or fourth night, and was delirious. In a few days the evacuation of Corinth took place, preventing my seeing or hearing anything from him for some six weeks or two months, when he surprised me very much by returning and reporting to his command for duty, in as good health, he said, as he ever was. The only thing to indicate that he had had a serious wound, was a scar and marked depression in the bone. He continued in good health, on active duty, making the campaign into Kentucky, with Bragg, in midsummer, returning about the first of October, at which time he became subject to epileptoid seizures, which gradually developed into well defined epilepsy, for which he was discharged in February, 1863. Mr. C. was in my office two or three months ago, in fine health. Says his "fits" have gradually become lighter, and do not now give him much inconvenience; and his father, in the last few days, said "he did not think he had them at all now."

S. W. CALDWELL, M.D.

Trenton, Tenn., February, 1882.

The Spread of Smallpox.

ED. MED. AND SURG. REPORTER:—

I have read with great interest your article on the "Spread of Smallpox." There is one form of contagion, however, that I do not find noticed very frequently in medical journals, viz: the contagion emanating from the rag-rooms of paper mills. During the last ten years, fully three-fourths of the smallpox cases I have attended occurred among employés in the paper mills, chiefly those engaged in sorting rags. The cases were most prevalent in those mills where domestic rags were used. I remember but few cases in those mills where imported rags were used, which, I have been informed, are very thoroughly disinfected before they are received at the mills.

While on the subject of smallpox, I would like to call attention to the question of the identity of variola and varicella. Although the majority of the profession do not believe in this identity, yet, during the last few years, several cases have come under my care which would seem to make me doubt whether the two diseases may not be one and the same. During November, 1879, I was called to see two children, a boy and a girl, aged, respectively, 12 and 14 years, who had high fever, pain in the back, and many of the prodromes of variola. They proved to be severe cases of varicella. During the convalescence of these children, they were visited by a girl, aged about 15 years. Ten days subsequently she was seized with the same symptoms, but the disease turned out to be variola, a malignant case, severe epistaxis and metrorrhagia being among the grave symptoms. Death occurred at the end of the sixth day. During the last four years a number of similar cases have occurred in my practice. It may be said in regard to the first cases that they were light cases of varioloid. Surely a light case of varioloid and a severe one of varicella are scarcely distinguishable from each other. I do not argue, from the few cases I have observed, that variola and varicella are identical, but merely submit these few remarks to the attention of the medical profession, in the hope of eliciting discussion, and probably throwing further light upon what I think may be considered a very important question.

ROSS R. BUNTING, M.D.

Roxborough, Pa., Feb'y 9th, 1882.

Congenital Dislocation of Tibia.

ED. MED. AND SURG. REPORTER:—

I was called last November to see a child some four hours old. I found the leg dislocated backward into the popliteal space and at a right angle with the femur. The midwife said the child was born head first. I reduced the dislocation with very little effort, when the knee seemed perfect in conformation. I applied a splint. At the end of two days, I removed the dressing, and found the joint all right. No heat, swelling or pain. Motion perfect, I re-applied the splint and kept it on for a few days, when I permanently removed it. From all I could learn, the dislocation must have occurred before the child

was born. It seemed strange that no soreness or inflammation should have followed so extensive a dislocation. NORMAN GRAY, M.D.

Columbus, Ohio, February, 1st, 1880.

NEWS AND MISCELLANY.

Test for Pepsin.

Dr. Carl L. Jensen, after showing the faults in the usual methods of testing pepsin, gives the following directions for testing its efficiency, claiming that the pepsin he prepares will stand this test: Dissolve thoroughly two grains of pepsin in twenty four ounces of water (do not use hot water), have the solution well stirred up. To three ounces of this solution (which will contain ¼ grain of pepsin), add fifteen drops of acid muriatic, c. p., and two hundred and fifty grains of boiled albumen, previously pressed through a sieve having thirty threads or meshes to the inch. Perform the test in a six-ounce bottle, placed in a water bath, and maintain a temperature of 100° Fah. for six hours, shaking the bottle every ten minutes. At the end of six hours strain the solution from the undissolved albumen, and place the residue upon several layers of blotting paper, until so much moisture is absorbed that the albumen has regained its former consistence, then weigh it and deduct. Dr. Jensen believes that one grain of his pepsin will dissolve nearly one thousand grains of albumen.

A Worthy Charity.

The Pennsylvania Institution for the Instruction of the Blind have issued a little circular, from which we note that there are nearly four thousand blind persons in this State, nine hundred and sixty-eight of whom are in Philadelphia county alone. The Pennsylvania Institution for the Instruction of the Blind will receive applicants between the ages of ten and twenty-five. The Pennsylvania Working Home for Blind Men will receive those between the ages of twenty-five and fifty, to learn trades and receive employment therein. The Pennsylvania Industrial Home for Blind Women will instruct and employ blind females of twenty-one years and upward. The blind in many counties know nothing about these institutions. It should be the duty of all citizens to avail themselves of these institutions for the relief of the blind of their neighborhood. For further information address William Chapin, Principal of the Pennsylvania Institution for the Instruction of the Blind, Philadelphia, Pa.

An Enterprising Vaccinator.

A pleasant-looking, middle aged man recently made his appearance in the upper part of Hunterdon County, New Jersey. He said that he was a physician sent by the Board of Health of Jersey City to vaccinate the people of the county. His affable manners and apparent air of authority convinced most of his hearers that he told the truth. He stated that the Board had ordered him to charge one dollar for every adult and fifty cents for every child whom he vaccinated, in order to defray the expenses incurred. He reduced the price when the parties were too poor to pay the sum asked, and even vaccinated some for nothing. He went from house to house in a buggy, and returned to the large towns at night. The fact that he was a fraud, and that the Board of Health had never sent out any physician, did not become known until the man had left the county. He collected a large sum of money.

Cinchona Cultivation in Jamaica.

New Remedies quotes from the New York *Times* some remarks on this subject, a few points from which are of interest. Jamaica offers great natural advantages to the cinchona cultivator. At present England takes all the bark grown there at the remunerative price of from eighty cents to two dollars and five cents a pound. Many gentlemen in the island, including the Governor, are engaging in the cultivation of the trees. The business is daily increasing, and the demand on the Botanical Department for seeds and trees can hardly be supplied. The profit to be derived is very great, though the enterprise would require at least $2500 capital. The yield, at a low estimate, would be worth $9000 per acre.

Disagreement among Physicians.

An exchange says that an interesting difference of opinion, that can be settled only by time, now exists between Professor Depaul and Dr. Tillaux, concerning a woman, more than seventy years of age, who has been an ardent worshipper at the shrines of both Venus and Bacchus. The Professor believes her to be pregnant, while the doctor is sure that the abdominal enlargement is due to a tumor of the liver. We will wait and discover the truth.

Personal.

From the *British Medical Journal* we learn that on November 12th several of the chief hospital surgeons of Paris gave a banquet to Mr. Spencer Wells. Professor Gosselin, in a happily improvised speech, rendered homage to the great services which Mr. Spencer Wells has rendered to humanity by demonstrating "the possibility and the opportunism of that splendid operation, ovariotomy." This was a well deserved compliment to a distinguished man.

Styptic Colloid.

The *Chemist and Druggist* (London) says that the following will instantly coagulate blood, forming a consistent clot, under which wounds will readily heal:—

Collodion,	100 parts
Carbolic acid.	10 "
Tannic acid,	5 "
Benzoic acid,	5 "

Mix the ingredients in the above order.

Alumni Association of Albany Medical College.

The annual dinner of the Alumni Association of the Albany Medical College will take place at the Delavan House, Wednesday, March 1st, 1882, immediately after the Commencement exercise at Tweddle Hall.

Obligatory Vaccination in Switzerland.

The Swiss National Council have made vaccination obligatory in Switzerland, by a vote of ninety to twenty-three. Every infant must be vaccinated during the first year of life, or at latest, during the second year. Infants born out of Switzerland, if not previously vaccinated, must submit to the same rule. No child will be allowed to attend either public or private school without a certificate of vaccination.

Ambulance Service in London.

A meeting to consider the feasibility of establishing a general hospital ambulance service was recently held in London. Many influential persons were present, including representatives from the principal hospitals. The Duke of Cambridge presided. Resolutions were passed in favor of the adoption of the New York system.

Diphtheritic Contagium.

We have received the supplement to the *National Board of Health Bulletin*, containing a full report of the investigations into the "Nature of the Diphtheritic Contagium," which have been conducted by Professor Wood and Dr. H. C. Formad. In a subsequent issue we will give a digest of the report.

Purification of Air in Hospitals.

Dr. Neale recommends, in the London *Medical Times and Gazette*, a chemical punkah, the fan of which, being made of vegetable fibre, is saturated with caustic soda solution, fed from a small tank above.

Items.

—Hepatotomy has been recently performed three times, successfully, by Mr. Lawson Tait, of Birmingham, England.

—Fifteen prominent citizens of Minnesota have been affected with trichinæ, from eating raw ham. Three of the number died

—On Boston authority it is stated that the latest high school translation of "*Arma virumque cano*" is "I sing of arms and the virus."

—Dr. C. H. Merrick, Seattle, W. T., will send to any address, on the receipt of a three-cent stamp, "The Decimal System of Writing Prescriptions."

—A Chicago druggist, supposing he was connected with a wholesale house, telephoned to the lady at the exchange, "Have you any large black nipples?" He is still waiting for a reply.

—Reports from all parts of the country indicate that smallpox is on the increase. It is very prevalent in New York, while fresh cases are reported from Massachusetts, Virginia, and Chicago. The disease is under control in this city, and the number of new cases reported is daily diminishing.

—A gentleman entered the office of a medical friend, and taking up what he supposed to be a toothpick from the table, began picking his teeth. Presently he pricked his tongue, and a consequent exclamation called the doctor's attention to what was going on. The supposed toothpick was a vaccine point, and it "took."

OBITUARY NOTICES.

—Dr. George T. Campbell, an old and respected physician of Skaneateles, N. Y., died on the 12th inst.

—Dr. Charles F. Stansbury died suddenly, from heart disease, in Georgetown, D. C., Wednesday, February 1st. Dr. Stansbury was born in New York City, in 1821, and has been prominently connected with the Masonic Order and with journalism, having been at one time a leading writer on the *National Intelligencer*.

—Dr. Isaac H. Conrad, a well known physician of this city, died, February 1st, of Bright's disease, in the 68th year of his age. Dr. Conrad was a descendant of one of the twelve families of German Friends who came from Cusheim, with Daniel Francis Pastorius, in1683, and were the first settlers in Germantown. He pursued the practice of his profession in Philadelphia, where he spent his entire life, and his services were rendered with equal freedom and ability to all who called on him, regardless of their means.

—Dr. James C. Jackson, for over thirty years a physician in Hartford, Conn., died Feb. 7th, of typhoid pneumonia. Dr. Jackson was born in Cornish, N. H., Aug. 22d, 1818. After a preliminary course of study, he entered Dartmouth College, in the Class of '44, and studied medicine at the same college, and subsequently in Philadelphia, where he received his degree of M. D., in 1847. He has been one of the most respected of the citizens of Hartford, and his death is felt to be a public loss. He was conscious up to within a few moments of his death, and felt his own pulse and noted his condition. He was twice married but had no children.

MARRIAGES.

COMEGYS—NOTSON.—At Columbus Barracks, O., Feb. 14th, by the Rev. C. H. Babcock, Captain Edward Tiffin Comegys, M.D., U. S. A., and Miss Minnie G. Notson.

LITTLE—HETHERINGTON.—On Thursday evening, February 9, 1882, at the residence of the bride, by Rev. C. F. Turner, George Little, M.D., and Miss Jennie Hetherington, both of Philadelphia.

SATTLER—RAY.—In Cincinnati, Ohio, February 9, 1882, Dr. Robert Sattler and Miss Maud Ray.

DEATHS.

MARCY.—At Cape May, N. J., Samuel S. Marcy, M.D., in the 89th year of his age.

MASON.—In New York, on Sunday, Feb. 12, 1882, Theodore L. Mason, M.D., in the 79th year of his age.

VIELE.—Entered into rest on Sunday, Feb. 12th, Augustus Viele, M.D., of New York, in the 67th year of his age.

WHITE.—In Riverton, N. J., on the 12th inst., Robert White, M.D., aged 24 years.

WHITALL.—In New York, on the 18th instant, at his residence, No. 607 Lexington av., Samuel Whitall, M.D., aged 41 years.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1305.] PHILADELPHIA, MARCH 4, 1882. [Vol. XLVI.—No. 9.

Original Department.

Lecture.

THE DISEASES OF PREGNANCY.

BY JAMES W. M'LANE, M.D.,

Professor of Obstetrics in the College of Physicians and Surgeons, New York.

Albuminuria.

(*Continued from page 7.*)

Gentlemen: We will return this morning to the subject which engaged our attention at the last lecture, the diseases of pregnancy. At the close of the hour we were considering albuminuria of pregnancy, to which I would again direct your attention. We saw that the cause of this disorder could not be due alone to pressure of the gravid uterus. Although there are certain facts which go to show that pressure may have something to do with the production of it. There are certain conditions, as in large fibroid tumors of the uterus, ovarian tumors, etc., in which the interference with the renal circulation from pressure is greater than that in pregnancy, but in which, nevertheless, albuminuria does not exist.

The true explanation of the albuminuria of pregnancy is not that it is due to any one cause, for we find, if we take any one of the alleged causes and try to account for the presence of all cases on that basis alone, that there are instances in which such an explanation is not at all satisfactory. In some cases it is due to one condition, in others to another; but in all cases we find underlying the albuminuria of pregnancy a condition of the blood which certainly predisposes to it. The condition of the mother's blood during pregnancy is all the time, as it were, in a deteriorated state, and this condition is exaggerated in the placenta by the giving up on the part of the fœtus, to the mother's circulation, various impurities. When to this state of the mother's blood the condition of pressure of the gravid uterus is added, you have, in certain cases, the two causes which go to produce albuminuria. Some writers, especially those across the water, claim that many of the cases of pregnancy in which albuminuria is present, but which go on to full term and are delivered successfully, terminate, in a comparatively short period of time, in death from Bright's disease of the kidney. If this were the case I should be much more anxious than I am at present, upon finding albumen in the urine of a pregnant woman; but I do not believe that it holds true, at least in this country. I have had patients who suffered from the albuminuria of pregnancy ten or fifteen years ago bear several children since, and are perfectly well to-day. In one of these cases the attack of albuminuria in the first pregnancy was so severe that I was compelled to resort to venesection three times in order to reduce the congestion of the kidney. Some cases of chronic Bright's disease of the kidney may be supposed to arise in an attack of albuminuria during pregnancy, when, in fact, it dated back a number of years earlier, to an attack of, perhaps, scarlet fever, and was simply aggravated during pregnancy in a manner then to show for the first time symptoms which would attract the attention of the patient or physician. But a simple case of albuminuria of pregnancy, I believe, will pass away under proper treatment. If not properly cared for, it may result in eclampsia and destroy life, but I have never seen a patient die in con-

sequence of remote effects of the albuminuria of pregnancy, say within a year or two after delivery, the symptoms of albuminuria in the meantime having subsided.

The appearance of any amount of albumen in the urine during pregnancy always gives me more or less anxiety, for I cannot tell to what extent it may go. If it appear in large amount and continue for some time, it will almost surely result in convulsions, one of the worst accidents which can befall a pregnant woman. Therefore, whenever a pregnant woman passes urine which contains more or less albumen, she should be kept under observation until after confinement. It is my rule always to examine the urine at stated intervals before confinement; and if a woman refuse to conform to this rule, and let me have a specimen of the urine as often as directed, for examination, I will not attend the case in labor; for, should any unfavorable symptoms develop in the meantime, the physician is the one on whom the blame falls.

Symptoms.—I will again speak of the symptoms associated with albuminuria of pregnancy, one of which is the presence of albumen in the urine. Headache. If this be persistent, and present every morning when the patient wakes, it should never go unheeded, but should lead to an examination of the urine. Œdema. This is especially to be regarded if it occur in the face and upper extremity, not alone in the ankles and feet. Vomiting, especially when it occurs after the first weeks, and is not to be accounted for by other conditions, is a symptom of albuminuria. Then there is a feeling of depression. The patient does not feel certain that she is as well as she would like to be. Then, trouble with vision, seeing motes floating in the air, etc., along with other symptoms just mentioned, as gastric irritability, headache, œdema of the face, a moderate amount of albumen in the urine, indicates a condition which requires pretty active treatment. Now, these symptoms of gastric irritation, of convulsions, etc., have been ascribed to a uræmic condition of the blood, and to the existence of particular poisonous properties in the blood. Now, we can say this, at any rate, that the kidneys, while they are secreting this large amount of albumen from the blood, are not taking away the effete matter which they should, and which, therefore, is allowed to remain in the circulating fluid to produce the disturbances belonging to albuminuria. This frequently causes imperfect development in the fœtus, sometimes leading to abortion, sometimes to a still-born labor, sometimes to an imperfectly developed child. I have seen a good many cases in which the albumen in the urine was moderate in amount, but led to labor at the seventh or eighth month, and to the birth of a small, shriveled, dead child.

The *prognosis* will depend upon the degree of congestion of the kidney, upon the general condition of the patient, and upon the question as to whether she will be properly treated. If let alone, the prognosis is bad; if properly treated, the prognosis is fair. There is always a certain amount of danger connected with these cases, shown by the fact that in twenty per cent., if let alone, you will have convulsive seizures. Now, the convulsive seizure may occur long before time for parturition. The prognosis in one case might be good, while in another it might be unfavorable. You meet with this condition much more frequently in primipara than in multipara, the reason being that, the abdominal walls not yet having been distended by a previous pregnancy, the kidneys are more pressed upon. I have a patient now in whom I examine the urine twice a fortnight, morning and evening. The morning urine did contain twenty-five per cent. of albumen; it now contains ten per cent.; while the evening urine contains only one-half of one per cent. I believe that in this case the presence of an extra amount of albumen in the urine in the morning is due to the recumbent position, causing pressure upon the kidneys during the night. When the patient stands up the uterus falls forward and the renal veins are less pressed upon.

The amount of albumen will sometimes lead us to correctly estimate the prognosis; in others it will not. A small amount of albumen with the presence of nervous symptoms before alluded to shows a case that is far worse than one in which there is a good deal of albumen without any nervous symptoms. You may have a case in which there is fifty per cent. of albumen for a week, and if uræmic symptoms do not develop, you may carry your patient through and deliver her of a healthy child.

Treatment.—You will infer, from what I have said, that the treatment is not by any means the same in all cases. You do not, for instance, always commence by giving cathartics. I will first speak of the treatment of a mild case, then of one more severe, and then of one quite severe.

You may examine the urine of a pregnant woman, say, after the fifth or sixth month, and at your first examination you may find ten per cent. of albumen; at the next, fifteen per cent.; and at still the next, twenty per cent.; there you have a case which is developing pretty rapidly in

this particular symptom, and yet the patient has no nervous symptoms. She may then eat too much food, particularly that of a nitrogenous character, after which she complains of headache on first rising in the morning, the headache, perhaps, disappearing after she has been about the house a while. Still, if this patient passed an ordinary amount of urine, there would be no necessity for treatment which could at all be called heroic. I would first see that she had a regular movement from the bowels every day, and for this purpose I would use some saline that would produce an exosmosis from the vessels in the intestine. The pathological condition, you will remember, is one of congestion of the kidney, with pressure, and our object is to relieve this, and yet not deplete the patient more than is necessary. We can make the intestine and the skin do pretty much all the work necessary to be done by the kidney, but which in its present condition the kidney fails to do. Having, by the saline cathartic, produced a fluid movement every morning, the patient should be put upon milk diet. I mean by milk diet, that the woman have no other food during the twenty four hours. The quantity of milk necessary to keep a person from feeling hungry, and to keep up the nutrition of the body, is somewhere from three to four quarts. Most women will take three quarts of milk without difficulty; four quarts may be a little irksome to take, but if they feel hungry they can easily add to the three quarts a fourth. I generally get them to take this amount by telling them to take a glass every hour during the day, and at mealtime to take about three glasses. Milk, taken in this way, is easily assimilated, and is not likely to cause the patient any digestive inconvenience; but, if necessary, you may add to it some lime water. You know that in many cases of Bright's disease, treated by giving the patient a milk diet, and keeping him in an equable temperature, life has been prolonged a long time. If, by this treatment, the amount of albumen in the urine greatly diminishes, the patient might be allowed to take with the milk some other simple nourishment; but should the amount of albumen again increase in quantity, I would put her back again upon the exclusively milk diet. This simple treatment will answer for some cases. Another point I would add, namely, that if the blood seem to be hydræmic, and there can be heard an anæmic bruit, the patient should be given iron. For this purpose I find the tincture of chloride of iron one of the best preparations of this drug. I have never seen it produce any tendency toward miscarriage, which some claim that it does. It may be administered in ten-drop doses, three times a day, and the patient will often be greatly benefited by it.

Now, suppose a patient, at the sixth or seventh month, takes a ride out in the park, without sufficient flannel clothing, exposing herself to the cold, and at night finds that she passes only a small quantity of urine; in the morning waking up with a severe headache, but without any stomach disturbance. When you are now called to see her, she complains of severe headache, and of dimness of vision, due to headache, and on examining the urine you may find that it contains sixty per cent. of albumen, whereas, three or four days prior, it was perfectly clear. Now, it would not do to treat such a case simply in the way that was mentioned above. The thing to do for that patient is to take away some blood. I do not mean by cupping, but by the lancet. I am aware that bleeding has gone out of fashion, but how many other things have gone out of fashion to be renewed again on proper occasions? and I believe that bleeding will again be resorted to more frequently than it is now. I have bled patients during pregnancy, time after time, and with the best results. I find that in some cases venesection controls the tendency to eclampsia in albuminuria as nothing else will do. There may not be so many people at the present day who would bear bleeding as well as those of many years ago, but when you have a patient, a plethoric woman, with the above-mentioned symptoms, I would advise you to bleed her at once. The result of this venesection is that the headache disappears. In one case in which I bled a patient, when I first saw her she had the kind of headache referred to, and great dimness of vision. The amount of urine passed was quite small, and on boiling it there was absolute solidification, from the presence of albumen. I bled her, and it was the opinion of two physicians who saw her afterward, as well as my own, that had she not been bled she would have died in convulsions within twenty-four hours. There was already slight twitching of the muscles of the eyelid. Sixteen ounces of blood were withdrawn, and the patient then remarked that the headache had disappeared. She was then given ten grains of calomel, which produced a free evacuation from the bowels, and afterward she received a diuretic. The result of this treatment was that she continued to do well for two or three weeks, when the symptoms became such as to require bleeding again, and two or three weeks subsequently she was bled a third time. In a consultation of three physicians it was unanimously decided that

premature labor should be induced. She was also bled a fourth time. Now, I have attended that woman in five pregnancies since, and she is perfectly well to-day.

If, however, the condition of the patient does not make you feel justified in withdrawing blood from the arm, you will find benefit to arise from placing cups, wet or dry ones, over the loins. If the patient be one of those women whose state is always one either of perfect bliss or excruciating torture, you may apply dry cups. As soon as you put them on the patient will tell you that they cause her intense agony, and that they must be removed; but expecting this beforehand, you will be talking about something else, and thus divert her thoughts until sufficient time has slipped away to produce decided benefit by this method of counter-irritation. In the meantime you will have sent a couple of pounds of flaxseed meal to the kitchen to be prepared as a poultice, which you will place between two layers of linen cloth and apply to the parts yourself, or have somebody to do it to whom you have given explicit instructions. When you want a warm poultice applied, if you do not give explicit directions as to how it shall be made and put on, it will probably be done as most people do it, made and applied as thin as a buckwheat cake. A poultice of that description cannot retain heat and moisture any length of time. It must be made an inch or an inch and a half thick, and large enough to cover the patient's back at the loins. A bandage should then be applied, as in parturition, and the patient should lie abed. Then, after giving her some cathartic, either calomel or a saline, administer some diuretic, and a very good one is the citrate of potassa, say ten grains every three or four hours, together with an infusion of digitalis, which of itself is a diuretic, but a much more efficient one when mixed with the citrate. The patient will probably be thirsty, and a good drink is one of the mineral waters, say the Apollinaris, the Vichy, or the Seltzer. A small quantity of bitartrate of potassa added to a good deal of water, and flavored with a little of the oil of lemon, makes a very good artificial drink, which acts as a diuretic.

By these means you can sometimes diminish the quantity of albumen in the urine, from fifty per cent. to five per cent. within twenty-four hours, and get your patient absolutely out of danger for the time being. I would then place her upon a milk diet, and have her live in a tolerably quiet way. And a word with regard to living in a quiet way. I have noticed over and over again that patients with albuminuria in pregnancy, especially those of nervous susceptibility, do well enough as long as they live up to the rules you prescribe for them, but the moment they go beyond them the quantity of albumen again increases. They will go, for example, to a dinner party, or to the theatre, or opera, where the atmosphere is unfit to breathe, being loaded with carbonic acid. Then visit one of the fashionable resorts and have a late supper. The next morning you will, perhaps, find fifty per cent. of albumen in the urine.

Taking an unusual amount of exercise, but an amount which would not fatigue a healthy adult, will increase the quantity of albumen in the urine of these patients. Now, you wish your patient to get the benefit of fresh air, and yet she must avoid too much exercise, and you are, therefore, at a loss to know what is best—to recommend her to go out in the open air, or to remain at home. Of this, however, I am certain, that in order to get fresh air, the patient should sleep in a room in which the window is left wide open, and as a protective against cold she should sleep in flannel clothing. Now, I am sure you can have no conception of the difficulty you will have in getting a woman to sleep in flannel. But it is very necessary that she should do so. I do not know why it is that women have such an aversion to flannel. Some will say they would rather die of albuminuria than wear flannel. It is probably because it irritates the skin, but I believe that that fact does good. When I say flannel, I do not mean one of those sham substitutes for it which have been invented during modern days. I mean the flannel made of pure wool. You can easily understand that while the kidney is in this condition the balance of function between the kidney and skin should be carefully guarded, lest, upon disturbing the function of the skin, the amount of effete matter circulating in the blood be increased and the patient be thrown into convulsions. I have known patients to die in whom the amount of albumen in the urine previous to undue exposure of the skin showed that by proper care in the way of dress they might be alive to day.

The skin, then, should be kept warm. The food should be of a nature that will not irritate the kidney, and such as will flush or wash it out. Milk will fulfill these requirements. If the blood be poor, thin, and bad, give the tincture of chloride of iron. If it be possible for the patient to exercise without increasing the amount of albumen in the urine, have her do so. If walking increases the amount of albumen try riding, or if

riding is first tried and produces an increase in the quantity of albumen, then try walking. The question whether the albumen is increased by exercise can only be determined by examination of the urine, perhaps frequently repeated. Then, if the amount of albumen runs up to thirty, forty, or fifty per cent., as the time of viability is reached, I would most strongly advise you to terminate pregnancy, and you will never regret having done so. I believe, however, that with this increase in the amount of albumen, and growing bad symptoms, if you do not terminate pregnancy at this time you will often have occasion to regret it. You can induce labor at the eighth month with comparative safety. Now, what change is going to take place during the last thirty days of pregnancy? The child, which now perhaps weighs three pounds and a half, is going to increase in weight up to seven pounds, and if at the present time the pressure upon the kidneys and the condition of the blood is such as to cause this large amount of albumen in the urine, what will be the state of things when this rapid growth of the child occurs? Convulsions may occur at any time, resulting, perhaps, in death both to mother and child.

Finally, you should place the woman in such relations that she may avoid, as far as possible, the dangers of the albuminuria of pregnancy. As said before, she should be placed in quiet surroundings, advised to sleep plenty, to avoid theatres, churches, and other places where a number of persons are congregated together to vitiate the atmosphere. She should avoid late suppers and overheating at any time; she should eat only easily digested food; she should avoid excitement and exposure to cold. In telling her the necessity for observing these general rules you should not excite in the mind of the pregnant woman undue apprehension, but at the same time she should understand that if she disobeys your instructions you will not be answerable for the results; that if she follows your advice everything will probably come out all right.

Communications.

ABSCESSES OF THE ABDOMINAL CAVITY.

Paper read before the Dearborn (Indiana) County Medical Society,

BY JOHN ELFERS, M.D.

Abscesses of this cavity, though not of frequent occurrence, yet are common enough to demand the careful study of every practitioner of medicine. When we consider their gradual and insidious mode of development, their great similarity to other diseases, it is not a matter of surprise that the most eminent practitioners and accurate observers have never suspected them at different times until discovered post-mortem.

And no doubt, if in some of the fatal cases of so-called typho-malarial fevers post-mortem examinations were made, it would be found that they were really cases of septicæmia, caused by collections of pus in some of the abdominal organs. An abscess of the liver may form and a portion of the organ become converted into a pus cavity, without any symptoms pointing to that organ.

Many cases follow attacks of dysentery, in others, malarial poisoning is the cause. Calculi and traumatic injuries, and lastly, emboli, may be followed by abscess. The embolus being carried into the liver by the portal circulation, it finally reaches a vessel so small as to arrest its further progress. The symptoms are a sense of weight in the right hypochondriac region; general malaise, attended by fever; coated tongue; bowels generally constipated; urine scant and high colored. If the inflammatory process is near enough to the surface to involve the peritoneum, there may be severe pain, but if this membrane is not involved, there may be no pain at all. Sometimes there is pain in the right scapular region, but this may be caused by disorders of the stomach, as well as the liver. In some cases nausea and vomiting are prominent symptoms. Sometimes there is marked soreness and a sensation of stiffness in the right leg, owing to encroachment of the disease on the psoas muscles and nerves in that locality. This was very marked in a case which came under my observation. Some authors claim that there is no elevation of temperature until after the pus is formed, and that then the fever is the result of septicæmia. In cases where the pus is working its way to the surface, there is generally considerable swelling, and in some cases this is very great. Jaundice is present in about one-third of the cases. This is most marked where there are calculi, or where there is considerable swelling of the mucous membrane of the ductus communis choledochus, thereby preventing the passage of bile into the duodenum, and necessitating its reabsorption into the blood.

I will now briefly give the clinical history of a case which came under my observation. Was called, February 5th, 1880, to see Caroline L., aged thirty-three, married, mother of four children, the youngest five months old. Has enjoyed fair health during the last year, until about one

week previous to my first visit. During this time she has complained of pain in the right side; headache; fever; anorexia; bowels constipated; urine scant and high colored, and stiffness and pain in the right leg.

Present Condition.—A woman of medium size, fairly nourished and dark complexion; heart and lungs apparently normal; firm pressure over the right side causes some pain, and over the centre of the tenth rib is a very sensitive spot about the size of a silver dollar—this was the only sensitive point that could be found; no swelling appreciable; pulse 100; temperature 102° Fahr.; tongue coated with a heavy yellow coat; bowels constipated; the quantity of urine diminished and high colored and well marked jaundice. The secretion of the mammary glands is nearly arrested, so that the child has to be fed, and is not put to the breast at all. Prescribed cathartics and diuretics, to be followed by cinchonidia and ipecac; ordered mustard plaster to be applied to the right side.

Feb. 6th. Somewhat better; has had several fecal evacuations; also free secretion of urine; pulse not so frequent; temperature 101°; considerable soreness of right side, but no swelling; still complains of stiffness of right leg.

Feb. 7th. No change; continued treatment. From this date until the 13th of February there was but little change in the symptoms; fever continued; sometimes morning, at other times evening exacerbations, each exacerbation being followed by or terminating in a profuse sweat. The bowels never moved without laxatives, and it was necessary to prescribe diuretics to stimulate the kidneys to perform their function. The tender spot in the right side had, in the meantime, changed its position, until now it occupied a position half way between the twelfth rib and the crest of the ilium, and two or three inches anterior to the transverse processes of the lumbar vertebræ.

Feb. 13th. Much better; temperature nearly normal; appetite improving, and the secretion of milk has returned, so that now she can nourish her child. There is some soreness in the right side, but it is supposed to be due to the blistering, which had been resorted to several times.

Feb. 14th. But little change.

Feb. 15th. Not so well; complains much of her side; her tongue is getting dry and red; abdomen is becoming tympanitic; bowels constipated; voids no urine; there is some swelling of her right side; does not sleep any during the night.

Feb. 16th. Symptoms same as yesterday.

Feb. 17th. Has been very restless all night; there is considerable swelling of the right side; no movement of bowels nor action of kidneys.

Dr. Barkley, of Farmers' Retreat, was now called in consultation; arrived at 5 P.M., when her temperature was 104°; pulse 140; other symptoms same as this morning. Prescribed a febrifuge for the high fever, to be followed by a mercurial purge, giving 10 grains of calomel for the first dose and three doses of 3 grains each afterward, to be given three hours apart. Applied blister and flaxseed poultice to the tumor, giving morphia to relieve pain.

Feb. 18th. Not much better; there has been no movement of the bowels after taking all the calomel, and has voided no urine; temperature not so high; does not suffer so much pain, but this is owing to the morphia; she has considerable tympanites; ordered some castor oil; continued the other treatment.

Feb. 19th. No change. After Dr. Barkley's arrival an enema was given, after which she had a free evacuation of the bowels, at the same time voiding urine. After the bowels had moved the tympanites disappeared. Does not suffer much pain. Continued the treatment, and in addition gave fld. ext. cascara sagrada, in ʒ doses, but without receiving the desired effect.

February 20th. Little better. Temperature 102, pulse 108. Continued treatment.

February 21st. We saw her at 10 A.M. As our laxatives and diuretics had failed we again resorted to an enema, with good effect. There is considerable tympanites; tongue is dry and red; has been sweating profusely during the night. Temperature 102°, pulse 100. From this time until 26th there was very little change. She had constant elevation of temperature, attended by night sweats; no appetite, with a typhoid condition of the system. The pain in her side would be very severe at times, then at intervals would be absent.

February 25th. We noticed considerable enlargement of the tumor.

February 26th. The enlargement is more marked and deep; fluctuation can be detected. An exploring needle was passed into the tumor about three-fourths of an inch, but without finding any pus. Thinking that further interference was not justifiable we continued the local applications and other treatment, giving as much beef essence and egg-nog as we could induce our patient to take, to sustain her until the pus would be near enough to the surface to be evacuated.

February 27th. No better.

February 28th. Rather failing. Abscess enlarging very rapidly and causing much pain.

February 29th. Has had severe pain in the right side during the night, and is much prostrated. Temperature 102°, pulse 120. On palpating the tumor, deep fluctuation can be detected. After using an ether spray Dr. Barkley made another exploration, and a drop of pus followed the instrument. A free incision was made immediately, when about a pint of laudable pus was discharged, with immediate improvement in the condition of our patient.

March 1st. Much better. Temperature 101°, pulse 108. Has had some pain during the night, but it is supposed to be due to the collection of pus in the cavity, the incision having closed during the night. After reopening the wound a large quantity of pus was again discharged, relieving her very materially. A tent was now introduced, keeping the wound open, thereby preventing the further accumulation of pus.

March 2d. Temperature 98½, pulse 96; is improving. The abscess continued discharging until March 10th, when it ceased; discharging altogether between thirty-five and forty ounces of pus. After the pus was evacuated the temperature never exceeded 99°; pulse ranged from 84 to 96; night sweats ceased; tympanites disappeared; appetite returned, and our patient made a rapid recovery, considering the critical condition she was in but a short time before. The most annoying sequel she complained of was the stiffness of her right leg and a sensation as if it was shorter than the other one, which continued for some time after she was around and attending to her ordinary duties, but finally disappeared altogether. The diagnosis in this case was not clear in the beginning; the only symptom pointing to the liver being the seat of the trouble was the jaundice. It is true there was considerable pain in the epigastric and right hypochondriac region, but that is nearly always present in ordinary remitting fever, of which we had the characteristic symptoms the first two weeks of the disease; but that it was not a malarial or continued fever is proven by the fact that the fever ceased immediately after the pus was evacuated. Doubtless the pus was formed during the first two weeks, and that subsequently the fever was due to septicæmia while the pus was making its way to the surface. The prognosis in these cases should always be guarded. If the abscess opens into the lungs, externally through the skin, or into the intestines, many cases recover; but if it opens into the peritoneal cavity the termination is almost invariably fatal. By the early use of the aspirator many cases may recover that would otherwise prove fatal.

The treatment in these cases should be, first, to limit the inflammatory action; second, palliative; third, to remove the pus at the earliest moment practicable. The first indication may be met by giving large doses of quinia, it being claimed that it has the power to stop the migration of white corpuscles; then to relieve the portal congestion cathartics should be given; those producing the greatest serous transudation with the least irritation possible are the most desirable. The saline purgatives, of which the sulphate of magnesia is generally at hand and very effectual, should be given during the active or inflammatory stage; where this is inadmissible, calomel may be given. All cathartics which have a cholagogue effect should be avoided; of this class aloes, podophyllin, rhei, colocynth, jalap, hold a foremost rank; but this objection cannot be made to calomel, as recent experiments seem to prove that it not only has no power to increase the flow of bile, but that the quantity is actually diminished during its administration. To relieve pain, anodynes must be given freely. Morphia given in small doses and frequently repeated until relief is obtained, is perhaps the best way where the patient is not near enough to the physician's office to afford an opportunity for frequent visits; but where they are near enough to be seen often, giving ordinary doses hypodermically is perhaps the best and most satisfactory. Local applications should be kept up constantly, in the form of poultices and blisters, thereby relieving tension and inviting the pus to the surface. We are taught by some text-books to use the aspirator early, to remove the pus, if any is present, and if not, the puncture will do no harm, but on the contrary, that frequent punctures with the aspirator needle are beneficial. When the tumor points externally we should be careful to satisfy ourselves that there are firm adhesions between the tumor and abdominal walls, then make a free incision, keep a tent in the opening, establish thorough drainage; and where the discharge is offensive and unhealthy, injections of weak solutions of carbolic acid will be beneficial. If, however, the pus is laudable, without any offensive odor, a free outlet is all that is necessary. In addition, keep up our patient's strength with good food and tonics, treating other symptoms as they arise.

Perinephritic Abscess.

By perinephritic abscess is meant inflammation, followed by suppuration of the connective tissue around the kidney. The most frequent causes are contusions, or any traumatic injuries. Some authors claim that a strain may be the

cause. In puerperal cases it may follow pelvic cellulitis, the inflammation extending up to the kidney. Symptoms are the same as in abscesses of other regions; there is generally deep-seated pain, aggravated by pressure; swelling, with discoloration of the skin, though the discoloration may be absent in some cases. It often occurs in persons of broken-down constitutions. Prognosis should be guarded. In subjects previously healthy, where the pus is evacuated externally, recovery is the rule. On the contrary, where the pus burrows into the surrounding structures, and in broken-down subjects, the prognosis is grave. Treatment in robust subjects should be antiphlogistic. The bowels should be thoroughly evacuated. If there is much disturbance of the circulation, arterial sedatives, with anodynes to relieve pain, are indicated. Emollient poultices, with a blister occasionally, are the best local applications. The pus should be evacuated as soon as possible, to prevent its burrowing in the surrounding structures. Purulent collections in the connective tissue around the cæcum are more common than that of the kidney.

Among the causes are external injuries, foreign bodies in the bowel, or the inflammation of ordinary typhlitis extending into the connective tissue. Symptoms are, a sense of weight in the right iliac and lumbar regions, swelling and pain, the pain frequently extending down the thigh. The thigh is flexed upon the abdomen, to relax the psoas muscles and structures of the anterior abdominal wall. The bowels may be constipated, but if there is no typhlitis present there will not necessarily be any interference with the function of the bowel. Sometimes there is nausea and vomiting, with considerable elevation of temperature. In some cases there is considerable depression of the vital powers.

In making our diagnosis we should be careful to distinguish between fecal collections and abscess, since the treatment is quite different. In abscess there is the swelling, severe pain, and constitutional symptoms of abscess. In fecal impaction there is generally no elevation of temperature; there is generally no discoloration of the skin. The collection may resemble a large tumor, be sensitive to pressure, like an abscess, but on making firm pressure some indentation can be made into the fecal mass; but we get no such results in abscess.

The prognosis should be guarded; if the pus evacuates externally the prospect for recovery is fair, but if it opens into the peritoneal cavity the termination is fatal.

Treatment.—Rest, anodynes, given freely, to relieve suffering, and local applications, constitute the treatment in the first stage. If there is no typhlitis a saline cathartic should be given, to evacuate the bowels, but if there is any inflammation of the mucous membrane of the intestine, all purgatives should be avoided. If the constipation is very obstinate, enemas will be beneficial. To remove the pus the aspirator may be used, but it is most desirable to get the pus near the surface; after firm adhesions have formed between the tumor and the abdominal wall, a free incision should be made, to afford a free outlet to the pus and any foreign bodies that may be present. They sometimes are the cause of the suppuration. After an incision is made it should be kept open, to afford free drainage. Then give tonics and plenty of good food, to husband the patient's strength until the danger is past.

THE HYPODERMIC ADMINISTRATION OF CARBOLIC ACID, FOR THE CURE AND REMOVAL OF FOUL AND ILL-CONDITIONED ULCERS, BOTH INTERNALLY AND EXTERNALLY SITUATED, POISONOUS BITES, HÆMORRHOIDS, CARBUNCLES AND TUMORS.

Read before the Texas Medical Association, at its session in the City of Waco, Texas,

BY N. B. KENNEDY, M.D.,

Of Hillsboro, Texas.

Mr. President and Gentlemen—I wish to offer for your consideration, on this occasion, some of the conclusions I have arrived at, during a period of three years, in the administration, hypodermically, of carbolic acid, for the cure and removal of ulcers, poisonous bites, carbuncles and tumors.

Carbolic acid, as you all know, is a solid, obtained from the products of the distillation of coal tar, between a temperature of 300 and 400 degrees. It was discovered by Runge, in 1834, who gave it the name of carbolic acid; but to Dr. Calvert is due the credit of introducing it into general use in the United States and England.

Carbolic acid may be defined to be an antiseptic anæsthetic, with slight caustic properties, and one of the most powerful disinfectants known. It has a very feeble claim to be recognized as an acid, being more closely allied to alcohol than acids, and, in consequence, is sometimes called phenylic alcohol. Carbolic acid has the power of preventing putrefaction in animal substances, arrests fermentation, and coagulates albumen. Carbolic acid in the liquid form is very slightly irritant; and when applied undiluted to the

skin, causes it to turn white, but produces very little pain. In contact with mucous surfaces, it acts in the same manner.

When I commenced, three years ago, experimenting with carbolic acid, hypodermically, it was with a firm belief that I would succeed. The experiments then commenced have ceased to be experiments, but have become established facts. I beg your indulgence while I rehearse to you, in as concise a manner as possible, some of the few out of many successful cases treated hypodermically and locally with carbolic acid.

Case 1.—Mrs. McC., a delicate little woman, I found suffering with hæmorrhoids, nearly as large as a goose egg. I injected, hypodermically, five or six drops of Calvert's undiluted carbolic acid into the centre of the tumor. The pain was but momentary, the anæsthetic effects of the acid following immediately on withdrawal of the needle. Four more injections effected a complete cure in this case.

Case 2.—I was called, August 19th, 1878, to see J. R. D., one of our most esteemed citizens, suffering with fifteen large carbuncles on his back and neck. He was suffering fearful agony, his family informing me he had not slept five minutes in five days and nights. I at once injected four or five drops of carbolic acid into each of the carbuncles with the happiest effects. In five minutes the old gentleman was in a sound and refreshing sleep, which continued without intermission from 4 o'clock P.M. until 9 o'clock A.M. He awoke from sleep greatly refreshed and without pain, and never did have any more pain. Twelve of the carbuncles aborted and three went on to suppuration, or rather, had commenced to suppurate, when I first saw them. A complete cure followed in three weeks.

Case 3.—Was called in the evening to see a boy, ten years old, who had been bitten in the morning by a mountain rattlesnake, in the *dorsum* of the foot. On arrival I found the little fellow suffering terribly, with the foot and leg livid and much swollen. I immediately injected five or six drops of the acid, as near into the bite as I could. The relief from pain was so immediate that the little fellow asked me to let him see the "little thing" that stopped his pain so quick. The swelling rapidly disappeared, and he never suffered another moment's pain.

Case 4.—J. L. F., a well-to do farmer, consulted me about a tumor on the back of his neck, which had commenced to grow and was paining him. I found a fibro-cellular tumor about the size of a small egg, and injected about twenty drops of undiluted acid into the centre of the tumor, which in this case suppurated, but in a week or ten days had entirely disappeared, and left no cicatrix behind.

Case 5.—My friend, Dr. Carmichael, of Peoria, Hill Co., Texas, invited me to see Miss J. A., a young lady, eighteen years old, in the full bloom of womanhood and beauty, for my opinion in reference to a very large tumor in her right breast. Her history was good; she had been in good health all her life. Two years since the *catamenia* was established, synchronous with which she noticed a swelling in the right breast. It had been growing for two years, and was now as large as a child's head. She had never suffered any pain in the gland. I diagnosed it to be a multilocular adenoid tumor. I injected about twenty drops of pure, undiluted acid into the most prominent portion of the tumor. The pain was very slight, the anæsthetic effects following immediately the withdrawal of the needle. I used the remedy once a week, from week to week, for two months, at the expiration of which time the tumor had decreased in size from that of a child's head to that of a goose's egg. I now commenced to use the remedy twice a week, and at this writing the tumor is about as large as a hen's egg, and the indications are favorable for its entire eradication. (Note.—In a month after this paper was read the tumor had entirely disappeared.)

I also use carbolic acid locally with the happiest effects. I was called to see the Rev. Mr. B's wife, who had been confined to her room and bed for two years, and had had various treatments, both from regular and irregular physicians, with but little benefit. An examination, per vaginam, revealed a a fully ulcerated os and cervix uteri, with an exceedingly offensive discharge and smell from the genitalia. I applied a fifty per cent. solution of the acid to the ulcers three times per week, and directed for her a good alterative tonic; and in three months she was the very picture of health.

A highly nervous young lady came to my residence to have a felon lanced, and was clamorous for chloroform, as she feared the pain would kill her. I bathed her finger in pure, undiluted acid, and lanced the felon almost without pain, much to her astonishment.

In conclusion, then, allow me to advance the opinion that in carbolic acid we have one of the most powerful remedies for good in the whole pharmacopœia, and one at no distant day destined to supersede almost all other medical and surgical procedure. An antiseptic and anæsthetic disinfectant, *facile princeps*, in surgical cases.

Hospital Reports.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

A CLINICAL LECTURE BY WILLIAM GOODELL, M. D.,

Professor of Clinical Gynæcology, in the University of Pennsylvania.

Reported by Wm. H. Morrison, M.D.

Carcinoma of the Neck of the Womb—Removal by Scraping. Remarks upon the Use of the Hot Wire in Removing the Neck of the Womb.

Gentlemen:—I am going to bring before you to-day a case of carcinoma of the neck of the womb; but as the woman is not fully etherized, I will talk until she is ready. What have we in that bowl? It is a hæmostatic. One of the best that you can have, because it is found in every house. It is good vinegar. In operations around the womb it is very useful. I do not know that I should care to use vinegar in a case where I wanted union by the first intention; but where you have bleeding and wish to check it, you should use vinegar. If you inject Monsel's solution into the vagina, its astringency is so great that it contracts the vagina to such an extent that you find great difficulty in your further operations. Suppose you have a hemorrhage from the vagina; you put in a sponge soaked in Monsel's solution, but the bleeding continues. You have to remove the sponge, and you are going to have a hard time to get others in, and unless the woman is under ether, she is not going to permit any examination.

This patient is thirty years old, married, and has had several children. I want to impress one thing on your minds; it is this; that carcinoma of the neck of the womb almost never occurs in a sterile woman. I want you to bear that in mind. Remember, in your diagnosis, that carcinoma of the neck of the womb is exceedingly rare in unmarried women, or rather in women who have never borne children. The inference, therefore, is, that carcinoma of the neck of the womb always occurs at the seat of a laceration of the cervix. On the other hand, when you come to cancer of the body of the womb, sarcoma, spindle and round-celled, cylindrical epithelioma, if you choose, these, which are very rare, usually occur in old maids and married women who have never borne children. I propose to-day to remove this cancer. They sometimes bleed furiously; but if the work is done rapidly it is not so alarming,

I want to call your attention to this woman's complexion. We have here the typical leaden color which is supposed to be pathognomonic of cancer. It is very marked in this case. It is an ashy color. After the operation that will disappear. This color is, I think, due to a sort of slow septicæmia. I do not consider it due to poisoning of the blood from the cancerous debris as such. You must not, however, be misled by the color, for sometimes women with advanced cancerous disease will have a fine, blooming complexion. This is especially true when they retain a fair amount of fat.

I shall now begin and rapidly break up these granulations with my finger. This woman does not know what is the matter, and I have been very careful not to tell her. She asked me the question, "Doctor, after this operation will I be well? Will I ever have to have another operation?" I evaded the question, and said, "I am not a prophet, and cannot possibly tell whether you will need another operation." I cannot bear to say *cancer* to these women, and I would advise you not to do it. The husband of a lady has been to see me twice, to make an appointment for bringing his wife from a distance. She has failed to come each time, because she is afraid that I shall tell her that she has a cancer. I have had women, on a number of occasions, say to me, "Now, Doctor, if I have a cancer, don't tell me." It is quite common for women, when the change of life begins, if they have any pelvic pain or trouble, to imagine that they are going to have a cancer.

The whole anterior neck of this womb is gone, and I have to be very careful not to get into the bladder. I shall now use this instrument. It is a gouge forceps, devised by Dr. Remey, of Cincinnati; the object is to have as little hemorrhage as possible; it is a very good instrument. The points which bleed are right in the cancerous mass, but after this has been removed the bleeding becomes less, and then it comes from the edges of the cervix, where the mucous membrane runs on the outside of the neck. In order to control this hemorrhage I employ pressure forceps, when necessary.

This operation is an exceedingly successful one, as a make-shift. This woman has been losing a great deal of blood; she has had considerable pain, but not the agonizing pain that she will have in the course of a year. In cancer of the neck of the womb pain does not exist to any great extent, unless the disease has passed the internal os. You know, gentlemen, that you can insert tenacula and make applications to the cervix, and elicit very little response, but when the sound gets past the internal os, you then cause pain wherever you impinge. This absence of pain often misleads physicians. I have on several occasions diagnosed cases of carcinoma which the physicians had not so considered because there was no pain. When the disease passes the internal os the sufferings are terrible. There is nothing which equals the suffering of a woman lingering on with the disease involving the uterine cavity. I once knew a woman take by the mouth thirty-five grains of morphine in twenty four hours, before she obtained any relief.

I have now removed every portion of the cervix, and have a funnel-shaped opening leading up to the internal os. As I have said, the results of this operation are very good. The woman's life will be prolonged. Some patients will die from exhaustion; one patient died from the disease involving the stomach; and others die from involvement of the pelvic organs. I say to these women, "I can promise to do you great good. I have cured some cases of this kind. I feel that I can positively promise you that the operation will stop the bleeding and pain for a long time." Sometimes a woman will say, "Now, Doctor, is this a cancer?" I never reply to that straight up and down. I say some-

thing like this, "You have asked me whether this is a cancer. There are varieties of cancer. If you mean is it a hard cancer, like that which comes in the breast, it is not. It belongs to the cancerous class. It is an epithelioma, of the most curable variety." I often use this word epithelioma, and cover my retreat by the use of a long word. Members of the family often say to me, "Do not tell the patient that she has a cancer, for if you do, she will go right down hill." I have known such cases. As soon as the disease was pronounced a cancer, the woman gave up, passed into a state of melancholy, and soon died.

I am now working up toward the bladder. This cancer will some day open into the bladder, but I do not wish to make the opening. Observe the nature of the blood which flows from the vagina. It is watery, because she has lost so much. That is hydræmia. I shall inject some vinegar, to check the oozing. This is not as powerful a hæmostatic as Monsel's solution, but it is much nicer. It is one that you may use with safety. You see that it blackens the blood, as nitric acid does.

The whole anterior part of the neck is not only gone, but I am directly upon the wall of the bladder, and the connective tissues lying below it. There is a space about the size of a silver dollar, where the womb is entirely gone. I am, therefore, a little cautious in what I do in that direction.

You may say to me, "Here is an operation which does not cure, but is simply going to prolong life; it is dangerous?" It looks like a dangerous operation. I have performed the operation a great many times. I kept the account of about fifty cases. I then stopped tabulating, as the history was always the same; a slight rise of temperature in the evening after the operation and the next day, and then no further trouble. I have never lost a patient from this operation—yes, there was one patient who died from tetanus, but she died so long after the operation that we were not sure that the operation had anything to do with it. I always felt that the tetanus was not due to the operation, but to the disease itself. No inflammation has followed the operation, although in two cases, I opened the peritoneum.

I am now working at the posterior surface, and I am a little afraid of getting into the rectum, for the disease has advanced beyond the vaginal junction.

I shall now apply the cautery (Paquelin's). In a former case I applied this cautery and the patient got perfectly well, or rather it all healed excepting a spot about the size of a ten-cent piece. On a future day I applied nitric acid without doing any good. I then concluded to apply the hot iron, without saying anything to her about it. I did so, but she never winced, although she wondered where the smell of burnt flesh came from, and thought that something must have burned in the kitchen. You can in almost all cases (there are some exceptions, to which I shall allude) pass the hot iron into the cervix without giving as much pain as by the application of nitrate of silver; but, on the other hand, just as we have painful hair (I remember seeing, in my young days, a case of plica polonica), as we have cartilage sensitive, which is usually not so, so we do occasionally meet with a case of sensitive cervix.

You observe that I remove the cautery from the vagina every few minutes. I do that for two reasons. First, because it makes so much smoke inside that I cannot see; and, secondly, because it would heat the speculum and burn the woman if I did not.

As regards secondary hemorrhage. Here is an operation where the hemorrhage at the time is sometimes very alarming; do you ever have secondary hemorrhage? I have never seen it. About ten days ago I operated, and there was one point high up where I could not stop the bleeding. The pressure forceps could not be applied; burning did not stop it. I then applied Monsel's solution and partly tamponed the vagina. She lost about a teacupful of blood after that. I have never had hemorrhage coming on some time after the operation when I operated in this way.

Let me say one word about taking off the neck of the womb. Your books tell you to take off the neck of the womb with the hot wire, in preference to the cold wire, but I have given up the hot wire, for I have had secondary hemorrhage of the most frightful character after its use. Some three or four years ago I made a big blunder. A midwife came to me with a prolapse of the womb and vagina. She was very anxious to have the operation performed; she said that she was only sixty years old. I permitted myself to be deluded. I removed the neck of the womb with the hot wire. On the seventeenth day after the operation she had an exceedingly dangerous secondary hemorrhage. I was sent for, and when I arrived I found that the physician had arrested the hemorrhage by a tampon. I removed everything and again tamponed. On the twenty-first day another hemorrhage occurred, and she died before it could be arrested. After her death the superintendent sent for her friends, and they told us that she had come to the hospital without their knowledge, and that she was eighty years old. There is where I made the mistake; in taking her statement, when she looked much older. All the arteries were found in a state of atheromatous degeneration.

About three years ago, I had the wife of a Southern Senator in the hospital. She had carcinoma of the neck of the womb, and I removed it with the hot wire. On the third day a most frightful hemorrhage took place. They sent for me in a hurry, but the lady would have died, if it had not been for the coolness of Dr. Harte, who stopped it with the red hot iron, and plugged the vagina. I stayed in the house for three nights, and the greater part of three days, but the bleeding did not recur. She died some time afterward, from the original trouble.

I assisted a gentleman in this city in an operation with the hot wire. On the fifth day hemorrhage occurred, and we tamponed her *secundum artem*. Several days afterward bleeding again occurred, and the woman died before we could get to the house. Look out for trouble if you use the red hot wire. As I say, all the text-books recommend its use, but it is so dangerous that I do not advise it.

I do not like to tampon the vagina after this operation, for it keeps all the discharges in the vagina, but if I performed this operation at a private house, I should dip a sponge in vinegar, pass it into this cavity and leave it there for forty-eight hours, because the sponge has meshes and into these meshes will dip the inequalities of the cervix. The cervix is going to contract, and every inequality of the cervix is going to find a corresponding depression in the sponge. If I remove the sponge in the twenty-four hours I am going to tear away some of the surface, and may get hemorrhage. I, therefore, leave it until pus has formed. Suppuration begins in twenty-four hours, and in forty-eight hours has advanced sufficiently to allow the removal of the sponge. If at the expiration of this time I find, when I catch the string fastened to the sponge, that it is not going to come away with ease, I leave it for twelve hours longer. The danger from septicæmia is not very great, for the whole surface has been seared with the hot iron, all the blood vessels and lymphatics have been sealed, and a clot has formed in their mouths.

She will begin to smell very badly after forty-eight hours; the vagina will be syringed several times a day with a carbolic acid solution. After the sponge has been removed, it will be syringed at least twice a day. I shall give her a suppository of one grain of opium when she is taken to the ward. The pain of which she will complain will be due to the pressure of the speculum on the coccyx. I always begin to give quinine after the operation. I try to cinchonize the patient within twenty-four hours, so that she will have buzzing in the ears. I give quinine because, in the first place, it is an antipyretic; secondly, it contracts the womb, so that the area of absorption is diminished; and, thirdly, it is an antiseptic.

These cases are to be undertaken without any delay. Just as soon as you have diagnosed a carcinoma propose the operation.

One word in regard to the diagnosis. I do not think that any student who leaves this University will, when he lays his finger on a carcinoma, ever mistake it for anything else; but he may, perhaps, put his finger on a polypus, or a fibroid tumor projecting from the os, or on a bad laceration, and think that he has a cancer. I thought that it was impossible to blunder about a carcinoma; but last summer I had a bad case of laceration of the cervix, which the woman said was done when a child only five months old was born. The tissues were so everted and there were such friable granulations, that I could not at first decide whether or not it was cancerous. I examined the woman closely, and determined that cancer had not occurred. I then proceeded with the operation, which resulted in a perfect cure.

One diagnostic point is that cancer always has friable vegetations and if it is an excavating cancer (usually they are excavating) you can feel a sharp edge around this cavity filled with friable vegetations. I compare it to the crater of a volcano. When the carcinoma projects into the vagina, you distinguish it from polypus and fibroid tumor by finding that in the latter conditions the tumor projects through the mouth of the womb, and you are able to distinguish the neck of the womb, but in the former, the cancer forms a part of the neck of the womb, and cannot be separated from it.

Editorial Department.

Periscope.

Rheumatic Fever—Death from Pyæmia.

The following interesting case is reported in the London *Medical Times and Gazette*, by Dr. Cockle:—

Ten years ago the patient got wet through, was laid up eight weeks in bed, with severe pains in his knees and shoulders, which pains changed their position to the wrists and ankles later on. The most acute pain was in the left side of the chest; worse on taking a deep breath or coughing. Has never been strong or well since, often having pains in joints; but what troubled him most was the shortness of breath and palpitation on taking any exercise.

On admission the patient complained of pain in the præcordial region; slight pain also in the left knee and ankle, which are a little swollen. Temperature at 6 P. M. 102.6°; pulse 120; respirations 30. Profuse acid perspiration. Heart's action tumultuous; no friction sound or increase in the præcordial dullness. The first sound heard over the left ventricle was unusually abrupt. A murmur was audible over the base. Ordered sodæ salicyl., gr. xx, every three hours till 9 A. M. the next morning; took gr. cxx, when, the temperature having fallen to 98°, it was discontinued. Pulse 160; respirations 40. Mild delirium.

November 8. At 3 P. M. the temperature went up to 102°; pulse 140; respirations 40. Sodæ salicyl., gr. x, every three hours. Delirium very violent; and, after taking three doses of the medicine it was again discontinued, as it seemed to cause the delirium, which continued to increase till 4 A. M., when the patient gradually sank into a comatose state (pulse 160; respirations 40; temperature 103°), and continued so till 7 A. M. on the 10th, when he died. One hour before death his temperature suddenly went up to 106.6°. The heart sounds remained unaltered throughout. While comatose there was no evidence of paralysis. Pupils equal, dilated, did not react to light. Respirations whiffing and shallow.

Autopsy, thirty hours after Death.—On removing the sternum and opening the pericardium, three ounces of clear, straw-colored fluid escaped. There were old and strong adhesions stretching from the pericardium to the heart, chiefly to the anterior aspect of the right ventricle and septum, and a few bands at the apex of the heart and right auricle. No evidence of recent inflammation. Weight, eight ounces. On opening the right ventricle and removing a small, dark clot, the valves and endocardium generally appeared healthy. There was marked bulging of the septum into the cavity of the right ventricle. On opening the left ventricle, the walls were seen to be greatly hypertrophied, and the cavity dilated. No alteration visible in the muscular structure. The aortic valves were very much thickened, but without roughening or abrasion of the edges. At the base of the valves was a small atheromatous abscess, about the size of a split pea, which had obviously burst; some gritty matter could be made to ooze from a rent in its wall. There was a small and similar open ulcer situated just at the base of the anterior aortic valve. The anterior cusp of the mitral valve was very much thickened, and a few small, warty growths were found at the margin. The aorta was speckled over with atheromatous patches for half an inch above the valves. Lungs: Marked hypostatic congestion; old pleuritic adhesions of left lung to pericardium. Small caseous and calcareous masses in both apices. Spleen, soft and friable; structure apparently healthy; weighed 10 ounces. Kidneys weighed six ounces each; some small, white, opaque spots were visible on the surface of both kidneys. The right had one large white patch, a quarter of an inch in diameter, surrounded by a zone of congestion; the section showed it to be an infarct broken down into pus; three other well-marked infarcts in other parts of the same kidney. The spots on the surface were found to be abscesses. Two small abscesses existed in the pyramids. The left kidney contained only one infarct of large size; but there were a great many small abscesses on the surface and in the pyramids. Capsule peeled off easily. The urine contained in the bladder was drawn off and carefully examined, but without showing a trace of albumen. Liver slightly fatty, but not markedly so.

It was decided that death was due to pyæmia, consequent upon the escape of softened atheromatous deposit.

A Bristly Boy.

Dr. H. E. Cauty reports, in the *Lancet*, the following singular case which came under his notice recently:—

The patient, a boy ten years of age, was somewhat imbecile, but well nourished. On removing his clothes, the upper part of the back, both shoulders, and down the outside of both arms, appeared covered with short bristles of a clear, darkish, brown-yellow color, acuminated apices, and very clean. These bristles were, at the edges of the group, gradually shortened from their full length of $\frac{3}{32}$ of an inch, until they joined the skin, which was at the junction raised into polygonal flat disks, finally graduating off to the sound, healthy skin of the hands, chest and back. The feeling communicated to the hand on passing it over the shoulders was exactly similar to that of touching a coarse brush, and the bristles gave way under the touch, resuming an upright position afterward. There were a few pink maculæ over the body, and considerable scaly thickening on and around the patellas. Pulse was quick, with nervousness. Bowels confined. Urine free and healthy. Tongue clean. Appetite good. Sleeps well. The bristles were expelled comedones, containing very few immature hairs and very little sebum, drying up into a horny substance. They were tolerably firmly attached, requiring more force to remove them than to extract a well-rooted hair; and when removed they left a small central depression surrounded by a circle of torn epithelium, which retained them in position. They averaged one hundred to the square inch, and had existed over three months. The boy was ordered mercurial aperient every third night, and to be well rubbed with olive oil and a few drops of carbolic acid. A week afterward all these comedones were softer, and those in process of expulsion much more visible. The bowels were now regular. Ordered three ounces of lard and half an ounce of glycerine, to be followed every morning by the benzine lotion. This treatment was continued for two months, when most of the comedones had disappeared. Some few, remaining partially expelled, had inflamed; and there were also some inflamed punctæ where the comedones had been. The lard and glycerine were continued. Three months subsequently, the boy was brought to the hospital, suffering from herpes. The skin where the first crop of comedones had been was found to be perfectly soft, not showing the least trace of their former existence. But the whole surface of the back, which had escaped before, was now covered with slight polygonal elevations, with a minute central spot, as though a comedone was about to appear, or failing to find an exit, had caused slight swelling. During the progress of this case, a solitary comedone made its appearance on the back, and the time of expulsion, from first to last, was six weeks. There appeared to be some family tendency to abnormal sebaceous secretion, as a brother, aged twenty, had his face, ears and neck, quite black with comedones of the ordinary character. The formation of comedones of an extra horny character is not very rare; but their expulsion and retention on the skin, in such quantities, is very uncommon.

Congenital Absence of Anus and Rectum—Fistulous Connection between Rectum and Vagina.

Dr. R. C. Waters contributes the following case to the St. Louis *Medical and Surgical Journal*. The patient, a healthy-looking infant, five days old, was found to present the following condition. The rectum terminated in a *cul de sac*, and the recto-vaginal fistula was situated about half an inch above the lower portion of this *cul de sac*. The vaginal terminus of this fistula alternately contracted and relaxed after defecation, very similar to the sphincter ani after an ordinary evacuation. The deficiency of the rectum, the space being filled with connective

tissue, was estimated, with the aid of a bent probe, to be about half an inch. It was decided to operate at once. A combined grooved director and aneuerism needle was introduced into the *cul de sac* as a guide. The integument was then divided through the median raphe and the tissues subsequently divided with a bistoury. The guide was easily reached, and introducing a probe-pointed bistoury, the opening was enlarged. There was considerable hemorrhage, and since the vessels could not be seized, Monsel's solution was resorted to, which effectually checked it. A tampon was introduced and the operation completed for the time. The next morning the tampon had been passed, and with it some fecal matter. Efforts to draw down the rectal mucous membrane and attach it to the integumentary margin of the anus were unsuccessful, and owing to the great hemorrhage that had occurred, dissection was not resorted to. It was decided to employ gradual dilatation. A thermometer case was used for the purpose. The patient living twenty-two miles from the doctor, this part of the operation was entrusted to its grandmother. The dilatations were continued daily for two weeks, and everything was progressing nicely, when the mother concluded that it gave the baby too much pain and discontinued them. The artificial channel degenerated into a fistulous canal, which eventually closed entirely, and the fæces passed through their previous channel. During the two weeks of dilatation, and for a month subsequently, the fæces continued to pass through the artificial channel. Erichsen states that unless you bring down the mucous membrane, the operation will fail, on account of fistulous degeneration of the canal. He did not want to use Monsel's solution in this case, on account of its interfering with this bringing down of the mucous membrane, but was compelled to resort to it as the only means of checking what threatened to be dangerous hemorrhage. After the operation the patient suffered from shock, but rallied, and was doing well until the cessation of dilatation, though Dr. Waters imagines that the fistulous degeneration which did occur might possibly have taken place at any time after the cessation of dilatation, when the mucous membrane was not brought down. The patient died a year later, from cholera infantum.

"Alkapton" in Urine.

Dr. George C. Armstrong presented to the Medical Society of the College of Physicians of Dublin (Dublin *Journal of Medical Science*) the following novel case. The specimen of urine was from a little girl, apparently in perfect health, whose mother he had attended three years before, in the worst puerperal convulsions he had ever seen. The mother remarked that the child's urine, although perfectly normal in appearance when first passed, on being allowed to cool assumed a deep color, and stained the child's linen. He sent some of the urine to Professor Tichborne, who had made the following analysis:—

The specific gravity at 60° Fahr. was 1.025. Albumen absent. Acid to test paper, and on standing it gave a slight deposit, consisting of urate of ammonia and a little mucus. The urea was scanty, not sufficient to account for the high gravity—being only one-half per cent. or 5.25 grains per fluid ounce. This urine presented a great peculiarity; it contained a substance which is only met with occasionally, and which has been termed "*alkapton.*" Bödeker met with a case, and Lionel Beale records another. It behaves like sugar, reduces copper, and probably may be viewed in a somewhat similar light pathologically. Estimated as a sugar it would give about eight grains to the fluid ounce. The urine was examined for bile reactions, but gave none. Dr. Armstrong put some of the urine into small bottles, and, having hermetically sealed them, left one exposed to light and put the other in a dark place. The latter specimen after six hours was not changed in any way.

The term *alkapton* is, it is presumed, derived from *alkali*, *ἁπτω* (fasten or bind), from its relation to alkalies; but the word conveys no real information, and was given at a time (1861) when the physiological chemistry of the urine was imperfectly understood. From various considerations it was thought probable that the peculiar substance in the urine exhibited belonged to the "aromatic series" of chemical compounds, the physiological relations of which group have been investigated with remarkable success during the past five years. The opportunities for observation of this abnormal condition have been too limited to predicate any doctrines concerning its pathological significance.

Hyoscyamia as a Depressor Motor.

The London *Medical Record* says that Dr. Seguin has recently published some valuable observations on this subject. He has used it in paralysis agitans, and choreiform affections with very striking results. In a case of paralysis agitans of four years' duration, where the patient had been under the care of several eminent specialists, and had received, without benefit, a great deal of treatment, including sedatives, counter-irritants to the spine and hypodermic injections of strychnia, he ordered the following formula:—

℞. Hyoscyamiæ (Merck's cryst.), gr. j
Glycerini,
Aquæ destillatæ, āā ℥ss
Acid carbol. pur., gtt. ss. M.

Mix, filter with care, and label "Hyoscyamia solution for hypodermic use, ℥j = $\frac{1}{100}$ grain."

The patient was given an injection of four minims ($\frac{1}{50}$ gr.), and half an hour later all tremor had ceased, the mouth was parched, and the pupils were dilated. An hour after there was great dimness of vision, extreme dryness of the mouth, and slight delirium. Four hours after the injection these symptoms had in a great measure passed away; but the hands were still absolutely quiet, and the tremor only very gradually reappeared during the ensuing two hours. On subsequent days, three or four minims were injected, with invariably the same results. In a week, so much tolerance had been produced that this dose did not produce the disagreeable

symptoms, though it did su pend the tremor for from two to four hours. Digestion was not impaired and no irritation was produced at seat of puncture. After six weeks of this treatment, pills containing $\frac{1}{30}$ of a grain were subtituted for the injection, with equally good effect. Two pills daily gave several hours of absolute freedom from tremor, without any toxic symptoms. A month later the patient became more sensitive to the drug, when the dose was reduced to $\frac{1}{30}$ of a grain in the morning and $\frac{1}{60}$ in the afternoon. The paresis of accommodation varied somewhat from time to time, but was readily corrected by weak convex glasses. The patient was discharged after four months of treatment, greatly benefited. In other cases equally good results were observed, $\frac{1}{30}$ of a grain in the forenoon and again at bedtime, being sufficient to almost arrest the trembling for from one to three hours. In none of the cases, however, was the improvement permanent, for after a few weeks, on omitting the drug, it was observed that the tremor was as before.

In two cases of chronic chorea, hyoscyamia proved most beneficial, but failed to effect a cure in one case, where the patient died suddenly, from uræmic convulsions, while the termination of the other case was not recorded. The therapeutic uses of this drug are summed up as follows:—

1. It is a mydriatic. 2. In small doses, it reduces the cardiac pulsations, and increases arterial tension. It may cause a fall of temperature and may produce a rash. It often gives rise to hallucinations and delirium. 3. In large doses, it increases the pulse rate, produces partial paralysis, and induces sleep. 4. It is indicated in mania, restlessness, delusions of persecution, dementia with agitation and destructiveness, epileptic mania, insomnia, status epilepticus, chorea, paralysis agitans, hysterical spasms, tremor, neuralgia, etc. 5. In mania and allied states, it induces sleep with great certainty. 6. In the status epilepticus, it shortens the attack materially. 7. It is a diuretic. 8. Its curative power is not great, and in most spasmodic diseases it is only a palliative.

Dr. Seguin suggests that, in cases of very acute chorea, where death is threatened by incessant motion, hyoscyamia may prove of benefit by securing muscular relaxation with certainty, thus allowing the patient to rest, and giving time for other remedies to act.

Syphilis Treated by Subcutaneous Injections of Mercury, Peptones, and Ammonia.

We read in the *Concours Médical*, January 14th, 1882, M. Martineau, wishing to make a series of experiments with peptones, and mercury, procured a carefully prepared solution containing —

Bichloride of mercury,	150 grains
Dry peptones,	225 grains
Pure chloride of ammonia,	225 grains.

This he mixed with a variable proportion of water and glycerine, according to the concentration desired. M. Martineau has applied this treatment to a great many patients, having up to the present time administered some thirteen hundred injections. He first gave, every third day, an injection containing $\frac{1}{30}$ of a grain of sublimate; while for the purpose of comparison, another series of patients, were at the same time, and like manner, receiving injections of only $\frac{1}{60}$ of a grain. Meeting with no local symptoms, he next gave these injections every two days, then every day, and finally gave as much as from $\frac{1}{20}$ to $\frac{1}{15}$ of a grain daily. He now uses as high as $\frac{1}{12}$ of a grain without experiencing any trouble, and proposes increasing this dose to $\frac{1}{10}$, or even $\frac{1}{8}$ of a grain, if the preparation continues being well tolerated.

During the course of this treatment no local symptoms have ever been observed, no indurations, nor abscesses; and no salivation has been induced; but care should be had, in giving injection, that it be exactly in the subcutaneous cellular tissue, and the back should be chosen, in preference to any other region, because there the sub-dermic cellular tissue is loose and abundant. In the great majority of cases no pain was produced. Two or three patients experienced a slight burning sensation, which lasted for several hours; while five others only felt some little warmth, which passed off in less than an hour. When pain was produced, it appeared after the first two or three injections, but never continued beyond the fourth. Even when as high as $\frac{1}{15}$ and even $\frac{1}{12}$ of a grain were being given daily, no stomatitis, nor any gastro-intestinal troubles have ever followed. This mercurial solution administered in the form of subcutaneous injections appears to have a more marked and rapid effect on the evolution of syphilitic symptoms than sublimate given by way of the digestive tracts. It will be found of especial value in those serious cases of syphilis where the symptoms are of so threatening a nature that they call for quick and decisive action. This therapeutic process is easily applied, and gives neither pain nor unpleasant symptoms of any kind.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Transactions of the American Ophthalmological Society, Seventeenth Annual Meeting, Newport, 1881. An illustrated pamphlet of three hundred and fifty pages. Copies can be procured, upon application to the Secretary of the Society, No. 9 West 35th St., New York.

——Contributions to Orthopædic Surgery, a new system of Surgical Mechanics, by Charles F. Stillman, M.D., comes to us in the form of a reprint from the Transactions of the American Medical Association for 1881.

——Contributions to Orthopædic Surgery, an Aid to the Mechanical Treatment of Weak Ankles and Inverted Feet, by Charles F. Stillman, M.D., of New York, is an illustrated reprint from the *Medical Record*.

——We have received the Sixteenth Annual Report of the Board of Trustees of the Connecticut Hospital for the Insane.

BOOK NOTICES.

A System of Surgery, Theoretical and Practical, in Treatises by Various Authors. Edited by T. Holmes, M.A. Cantab. First American from the Second English Edition. Edited by John H. Packard, A.M., M.D., Surgeon to the Episcopal and St. Joseph's Hospitals, Philadelphia. In three volumes. Volume III, 1059 pp. Philadelphia: Henry C. Lea's Son and Co. 1882.

This makes the second American issue of Holmes' System of Surgery we have recently been called on to notice. A synopsis of this volume will present to the reader its merits in a small space. Part I, including Diphtheria and Croup, has been written by A. W. Barclay, M.D., and revised by J. Solis Cohen, M.D. Diseases of the Larynx, by Arthur E. Durham, Esq., revised by J. Solis Cohen, M.D. Diseases of the Thyroid Gland, by Holmes Coote, Esq., revised by the same. Apnœa, by George Harley, M.D., also revised by J. Solis Cohen, M.D. Part II. Diseases of the Bones, by T. Holmes, Esq., revised by Thomas Markoe, M.D. Excision of Bones and Joints, by the same author, revised by John H. Packard, M.D. Diseases of the Joints, by Athol A. Johnstone, Esq., revised by E. H. Bradford, M.D. Diseases of the Spine, by Alexander Shaw, Esq., revised by E. H. Bradford, M.D. Orthopædic Surgery, by W. J. Little, M.D., revised by Dr. Bradford. Affections of the Muscular System, by T. Tatum, Esq., and J. Lockhart Clarke, Esq., M.D., F.R.S., revised by P. S. Conner, M.D. Part III. Diseases and Injuries of Nerves, by J. Lockhart Clarke, M.D., and C. E. Brown-Sequard, M.D.; Locomotor Ataxy, by J. Lockhart Clarke, M.D.; both revised by Professor Roberts Bartholow. Part IV. Gunshot Wounds, by Thomas Longmore, C.B., F.R.C.S., revised by Hunter McGuire, M.D. Part V. Anæsthetics, by Joseph Lister, Esq., revised by J. C. Reeve, M.D. Amputation, by Joseph Lister, Esq., F.R.S., revised by Charles T. Hunter, M.D., and John H. Packard, M.D. Operations upon the Arteries, and Various Operations, by John H. Packard, M.D. Plastic Surgery, by Holmes Coote, Esq., revised by T. G. Morton, M.D. Minor Surgery, by Thomas Smith, revised by John H. Packard, M.D. Part VI. Diseases of the Breast, by J. Birkett, Esq., revised by Theodore A. McGraw, M.D. Diseases of the Skin, by Arthur Van Harlingen, M.D. On Parasites and the Diseases which they Produce, by G. Buck, Esq., revised by Joseph Leidy, M.D. Venomous Insects and Reptiles, written and revised by the same two gentlemen. Surgical Diseases of Childhood, by T. Holmes, Esq., B. E. Brodhurst, Esq., and Alex. Shaw, Esq., revised by Samuel Ashhurst, M.D. Surgical Diagnosis and Regional Anatomy, by T. Holmes, Esq., revised by John H. Packard. M.D. On Hospitals, by Sir J. Ronald Martin, C.B., F.R.S., revised by Norton Folsom, M.D.

The Study of Trance, Muscle Reading and Allied Nervous Phenomena, in Europe and America, with a letter on the moral character of trance subjects, and a defence of Dr. Charcot. By George M. Beard, A.M., M.D. pp. 40. New York: 1882.

This little brochure is readable and interesting. It is a résumé of the psychology of trance, and contains an account of a contest between the author and Brown, the mind reader. While it possesses no practical value to the busy physician, it will serve to while away an hour or two of leisure.

Transactions of the American Medical Association for 1881. Printed for the Association by Collins, 705 Jayne St., Philadelphia.

This volume of six hundred and eighty-four pages ought to be found in every physician's library. Since it contains the deliberations of the representative body of American physicians, all should be familiar with its contents.

Marriage and Parentage, and the Sanitary and Physiological Laws for the Production of Children of finer health and greater ability. By a physician and sanitarian. pp. 185. New York: M. L. Holbrook & Co., 1882. Philadelphia: E. Claxton & Co.

This is a subject well worthy of much study and thought, but hardly suited to a popular treatise, as the present one is. We regret that the author fails to give his name.

A Treatise on Hygiene and Public Health. In two volumes. pp. 1500. Edited by Albert H. Buck, M.D. New York: William Wood & Co., 1879.

This is an elegant work, that should be possessed by every physician who can afford to buy it. We all now realize how much may be done to prevent disease, and since hygiene teaches us how to make this knowledge available, it becomes the imperative duty of every would-be progressive physician to know something of this science. The work before us is an exhaustive treatise, than which there is no better, and we do most heartily commend it.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

HOW TO CONTRIBUTE TO MEDICAL JOURNALS.

At the last meeting of the International Medical Congress, Dr. Billings, in the course of an address on Medical Literature, enunciated some very valuable rules for medical writers, among which were, "always have something to say, and stop when you have said it." This little sentence contains the embryo of professional writing. We have in this country a class of men who desire, and are ambitious, to see their names in print. It matters not to them whether what they have written tends to benefit mankind or not; if they can only get their article published they are satisfied. Hence, medical journals innumerable have, within the past few years, sprung into existence throughout the country. This is an age of unparalleled progress, and new items of universal professional interest are being daily brought to light. These new points are what the physician desires to know, and from the knowledge of them he derives benefit. By the accumulation of individual clinical experiences do therapeutical measures become established. The science of medicine is not yet a certain science; no absolute laws without exceptions can be laid down. Therefore, it occasionally falls to the lot of every physician in active practice to meet with a case, or some cases, unlike any that have been before reported. Now, then, is his opportunity! If he meets with a strikingly novel case of disease, or if he has some unusual experience with either well-known or new therapeutic measures; or if he meets with some remarkable surgical case; or if he discovers *conclusively* some more potent method of treating any particular diseased condition than that hitherto in use, he will benefit mankind and advance his chosen science by making his observations public through some medical journal. But let him be sure, beyond any possibility of doubt, that he has something *new* to say; let him say it as concisely and briefly as possible, and stop when he has *finished*. Long theoretical dissertations or quotations from text-books are objectionable. If he meets with a case of disease that has run a very unusual course, terminating in death, and that may seem to him very interesting, he ought not to report it, unless he has been able, by post-mortem examination, to verify or falsify his ante-mortem diagnosis. Since without this necessary adjunct the bare narration of the symptoms, hypothetical diagnosis and treatment will leave the reader in as much doubt when he has finished reading as the author was when he commenced writing. Therefore, if you desire to prepare valuable communications for medical journals, you must observe the following rules:—

1. Be positively sure you have something *new* to contribute.
2. Tell it in as few words as possible.
3. Do not plagiarize from text-books.
4. Never report an uncertain case, without a verification or falsification of the diagnosis by a post-mortem examination.
5. Do not send the same communication to half a dozen journals. Select one and send it to no others. If you neglect this rule, your habit will ultimately be found out, and *all* journals will reject your communications.

THE INFLUENCE OF ALCOHOL ON DISEASED CONDITIONS.

A large volume could be written on this subject, but a few words will serve our present purpose, which is to call the attention of physicians to the great influence that the use of alcohol may have on various diseased conditions of the human system. The effects of alcohol have been frequently, and we might say, exhaustively discussed, and as a result, when we distill all the arguments, pro and con, we are forced to believe that, to say the least, alcohol is not of any particular benefit to healthy mankind. There are certain conditions of ill health, it is true, in which it may and does do good, but the weight of evidence is in favor of the doctrine that, in the large majority of cases, it is only productive of harm. We all know that a large majority of men use alcoholic drinks as ordinary beverages, and without themselves realizing how much they drink, many of them will daily consume at least a pint of whisky, who consider themselves, and are generally regarded, as only *moderate drinkers*.

No doubt (we speak from experience) many physicians have had, from time to time, presented to their notice instances of chronic disease in which remedies that ought to produce certain effects have failed to do so, and they wonder and cannot comprehend why this should be so. May it not, in many cases, be due to the counteracting influences of even moderate alcoholic indulgence? For illustration, let us select nasal catarrh. Here we have a congestion of the mucous membrane of the nasal passages. Alcohol has a tendency to produce congestion of all the cranial contents. Suppose you may use all the most approved astringent remedies to contract the dilated vessels and remove this nasal congestion, and at the same time the patient continues to use alcoholic drinks; you will have a hard road to travel; it will be like trying to fill a bucket with a hole in the bottom; your astringent efforts will be overcome by the congesting influence of alcohol.

Again we might instance chronic gastritis (which is often produced by the inordinate use of alcohol); your remedies, though well directed, may fail to afford relief if the patient continues the use of alcohol. We all know, for sure, this much, anyhow, that alcohol is a local irritant, and we know that local irritation means a congestion of the part so irritated; therefore, when alcohol is taken into a congested stomach, you may use all the remedies in the pharmacopœia, yet this irritation and congestion will persist, since it is constantly being produced. We might go on indefinitely, illustrating our argument, but it is unnecessary.

Our purpose has been merely to direct your thoughts into the channel indicated, and to cause you to think that chronic disease may be maintained in many cases by the use of alcohol. When you meet a chronic disease that does not yield to your well selected remedies, and when you are at a loss to account for this failure, inquire into the tippling propensities of your patient. Do not be satisfied when he tells you that he is a "*moderate drinker*," but peer minutely into his habits, and learn what moderation means in his particular case.

In some, moderation means a pint or two of whisky daily, or forty glasses of beer; while to others four or five ounces of whisky would constitute excess. This is a collateral consideration in the treatment of disease, not to be overlooked, while attention to it will surely aid much the remedial action of drugs.

NOTES AND COMMENTS.

Artificial Anus from Tying the Bowel with the Umbilical Cord.

Dr. Latimer reported the following unique case to the Clinical Society of Maryland, *Maryland Medical Journal*. He was called to see a newborn infant, that had been delivered by a homœopath, who, for some reason, had applied a ligature to the cord three successive times. The last time, some protrusion of the intestine had occurred and this had been included in the ligature. The result was sloughing, and the formation of an artificial anus at the umbilical opening, the lips of which protruded, and from them gas and fecal matter escaped. Five days subsequently he found about six inches of the bowel invaginated in the opening and lying out on the abdomen. It was reduced with difficulty and only after incising the upper part of the aperture. The child died the next day.

The Pre-Cancerous Stage of Cancer.

Mr. Jonathan Hutchinson makes some valuable remarks on this subject in the *British Medical Journal*. He believes that if properly treated in its incipiency there is a very good prospect of curing many cases of cancer. "Too late! Too late!" is the sentence written but too legibly on three fourths of the cases of external cancer concerning which the operating surgeon is consulted. The bitterest reflection of all is, that usually a considerable part of the precious time which has been wasted has been passed under professional observation and illusory treatment. He never loses an opportunity to enforce the doctrine of the local origin of most forms of external or surgical cancer and the paramount importance of early operation. All suspicious sores should be considered syphilitic, and treated internally by iodide of potassium, and locally by caustics, until the diagnosis becomes clear. In most cases of cancer of the penis, lip, tongue, skin, etc., there is a stage, often a long one, during which a condition of chronic inflammation only is present, and upon this the cancerous process becomes engrafted. Phimosis and the consequent balanitis lead to cancer of the penis; the soot-wart becomes cancer of the scrotum; the pipe sore passes into cancer of the lip; and the syphilitic leucoma of the tongue, which has existed in a quiet state for years, at length, in more advanced life, takes on cancerous growth. A general acceptance of the belief that cancer usually has a pre-cancerous stage, and that this *stage* is the one in which operations ought to be performed, would save many hundreds of lives every year. What is a man the worse, if you have cut away a warty sore on his lip, and when you examine sections microscopically you find no nested cells? You have operated in the pre-cancerous stage, and have probably effected a permanent cure of what would soon become an incurable disease. Instead of looking on while the fire smoulders, and waiting till it blazes up, we should stamp it out on the first suspicion. He does not wish to offer any apology for carelessness, but he has not in this matter any fear of it.

Poisoning by Stramonium.

In the *Canada Lancet* Dr. Casey A. Wood reports a case of poisoning in a little girl, five years of age, from eating the seeds and surrounding albuminous pulp of the datura stramonium. She presented the following symptoms. She first complained of great dryness in the throat and burning at the roof of the mouth. Shortly afterwards she became very thirsty, but seemed unable to swallow the water that was offered to her. This was followed by nausea without vomiting; twitching of the muscles of forearm and legs; soon after which she became delirious; followed by unconsciousness and convulsions. Eyes bright and glistening; conjunctivæ red and injected, pupils widely dilated, and insensible to light. She would talk rapidly and incoherently for a time, and then burst out into laughter. The skin of the whole body was dry, felt hot, and was of a deep, bright scarlet color. Temperature normal, pulse small and accelerated. A strong purgative of calomel and rhubarb was administered, followed by a large rectal injection of linseed tea and castor oil. This produced several copious movements. They relieved her, and with the last one she passed three or four half digested stramonium seeds. For six hours she was given, every hour, five grains each of chloral hydrate and bromide of potassium, without any effect. She then received a hypodermic of $\frac{1}{10}$ gr. muriate morphia. Three-quarters of an hour afterwards she fell into a troubled sleep, which lasted all night. The next morning she was still nervous, with a red, flushed face, twitching hands and widely dilated pupils, but perfectly conscious. The nervous and other symptoms passed off during the day, but the mydriasis lasted all that day, the next night and part of the following day, when she seemed as well as ever.

Inoculation for Typhoid Fever.

Dr. T. H. Buckler writes to the Boston *Medical and Surgical Journal*, suggesting the inoculation of children for typhoid fever, as well as for the various tubercular diseases. After discussing and demonstrating the great fatality of typhoid fever, he goes on to say that by introducing the germs of this disease into the system, a simple continued fever might be produced, which would confer immunity from the disease thereafter. He claims to have seen five cases, all in one group, where continued fever was evidently produced by the patients having swallowed the morbid poison of typhoid disease. In all, a mild typhoid fever, of the adynamic type, ran the usual course of twenty-one days. [While this proves nothing more than the fact that five persons exposed to the typhoid poison had mild attacks of the disease, while five others equally exposed might have had fatal seizures, which we all know already, yet this communication suggests investigation as to whether typhoid inoculation or vaccination is a possibility.—Ed.]

Abscess of the Pancreas.

Dr. John Shea reports a case of this rare disease, in the London *Lancet*. The patient, a woman, aged 29 and married, commenced (fifteen months previous to her admission to the hospital) to suffer from pain in the region of the liver, increasing gradually in severity and shooting in character. Appetite poor; urine normal; bowels regular and fæces dark. On admission, great tenderness over gall bladder, and jaundice; lungs and heart normal. Under alkaline treatment, with pills of enonymus and henbane, she recovered rapidly, so that in a week she was able to go out. At the end of another week she was quite well, but very weak. In a few days, however, pain over the gall bladder returned, with nausea and vomiting of dark bilious matter, and jaundice. Sinapisms and effervescing medicine were resorted to. Bowels were moved freely, but she continued to grow worse, and lapsed into unconsciousness. All medication proved fruitless, and she soon died. At the autopsy the liver was found large, pale and soft. Pancreas enlarged and hard, being the seat of an abscess, containing pus. A round worm, seven inches long, was found folded upon itself, lying in and obstructing the pancreatic duct, the larger portion of the worm being in the duodenum. Heart somewhat large and fatty. All other organs fairly normal. This case is interesting, particularly in directing our attention to this organ as the seat of some of those obscure cases of disease for which we find it so difficult to assign a cause. Unfortunately, the diagnostic points of disease of this organ are far from accurate, so that in the majority of cases a post-mortem is the only means of making a positive diagnosis. At the same time it is a fortunate thing that affections of this organ are extremely rare.

Ovariotomy.

In the course of a case of ovariotomy reported in the Boston *Medical and Surgical Journal*, Dr. Walter F. Atlee thus summarizes some of the points necessary for success in this operation, with which he has had so much experience as to entitle his remarks to great consideration. In order to avoid any delay, he gives written directions to the patient to have ready—

"Two basins, a bucket, a tin cup, a small tub, a pitcher of hot water, towels, cotton, or carbolized tow, one and one-half yards of flannel, large pins, a package of patent lint, ice, brandy, a feeding cup (or a glass tube, bent), one ounce of chloroform, eight ounces of ether, bottles of hot water, adhesive plaster and a patent ironing table." The patient must have on a night dress and warm woolen stockings. The day before the operation, a dose of castor oil is to be given, and nothing to eat afterwards, only barley water. On the morning of the operation, an enema of warm water is given. In performing the operation, the patient, having her night dress drawn up above the waist, her feet protected by woolen stockings and her lower limbs covered by a double blanket, is placed upon a patent ironing table, which being just large enough for the patient to lie upon, allows the greatest liberty to the surgeon and his assistants. The table is covered with blankets, to make it comfortable for the patient. The knees and elbows are secured by a roller bandage, so as to prevent struggling. A rubber blanket with a large central opening is then thrown over the patient, the edges of the opening being secured to the abdomen by soap plaster. Ether and chloroform, principally the former, are used to anæsthetize. The patient is now ready for the operation. The carbolic spray is not used, but the raw surface of the pedicle is cauterized with carbolic acid. The sponges are washed in carbolized water. A tablespoonful of brandy is given just before the etherization is commenced. If there is much pain or restlessness after the operation, a pill containing $\frac{1}{8}$ grain valerianate of morphia is given and repeated, if necessary, once or twice on the succeeding day. The diet should consist of milk and beef tea. Dr. Atlee, orders the beef tea to be made as follows: one pound of lean beefsteak is cut up small and soaked in cold water, then gradually brought to a boil and boiled for fifteen minutes, then skimmed, strained, and seasoned.

Grindelia Robusta.

The committee on Therapeutics of the Medical Society of the County of Kings, Brooklyn, N. Y., have just made to the Society a report on this drug, published in full in the journal of the Society for ary, 1882, from which we extract the salient points. Nine cases of asthma were reported in which this drug gave marked relief when all other medicines had failed, while ten cases were reported in which it failed to give any relief whatever. During two months, every case of bronchitis, whether acute or chronic, or in phthisical patients, in St. Peter's Hospital, were given the drug, with the result that expectoration, cough and respiration were usually favorably modified, but not in a degree markedly different from the effects of various other treatments. Frequently the medicine would, after a few days, produce headache, and

would have to be suspended, though it was usually well borne by the stomach. The preparation used was Squibb's fluid extract, in doses of from ℥xv to f℥ss, and the conclusions seem to be that this drug does not possess any therapeutic value in asthma, superior to that of the drugs in ordinary use.

Smallpox Pustulation in the Fœtus in Utero.

Dr. Richard H. Day, of Louisiana, makes the following remarks on this subject in the *Maryland Medical Journal:* He reports a case that came under his observation many years ago. A number of cases of smallpox occurred among a colony of slaves, some mild and others confluent; among the latter was a colored woman, some thirty years of age, who was near the end of gestation. She gave birth to her child some ten or twelve days after the eruptive stage of the disease, and within from two to three weeks of her full term. The fœtus was evidently living up to within a short time of its birth, as the mother had felt its motions distinctly within a few hours of its delivery; and when born there was no appearance whatever to throw discredit upon the mother's statement; but the spectacle presented was a sickening one. A fœtus covered with a full and distinct crop of smallpox pustules, from head to foot, some of them already ruptured, and the excavations filled with pus, and many still unruptured, so characteristic as to mark the true nature of the eruption at first sight. The mother recovered.

Carbolic Acid in Diphtheria.

Dr. Z. T. Magill, of Lincoln, Mo., contributes to the Chicago *Medical Journal and Examiner*, January, 1882, the following method of treating diphtheria, from which he has secured better results than from any other. He uses an ordinary hose, from three to five feet long and about one inch in diameter. One end is placed over the spout of a common tea kettle, into which has been put half a gallon of water and half an ounce of carbolic acid. The kettle is then placed on the stove, over a good fire, and when the water reaches the boiling point, the free end of the hose is carried under a blanket thrown over the patient's head. The room must be closed. In a short time the patient will perspire freely. If persevered in at short intervals, breathing becomes softer, and presently, after a succession of quick expulsive efforts, the patient throws off a coat or tube of false membrane. The acid vapor seems to prevent the re-formation of exudation. Alcohol and sulphate of quinine are used in conjunction with the acid, for their supporting properties.

Sulphide of Carbon and Iodoform in Phagedænic Ulceration.

From the *Revue Médicale* we note that Dr. J. Chéron, at the Hospital of Saint Lazare, employs the following solution: Sulphide of carbon, 30 parts; iodoform, 5 parts. Iodoform dissolves readily in carbon sulphide, and the rival odors are mutually weakened by association. The pain is less severe than when the sulphide of carbon alone is applied, and it ceases as soon as the liquid has evaporated. It is best applied with a glass brush. Dr. Chéron has seen cicatrization speedily result in cases which had proved rebellious to all the usual treatments.

Nits in the Hair.

From the London *Lancet* we note the two following methods of removing nits from the hair:

1. Apply spirits of wine freely, so as to dissolve the glue which attaches the nits to the hair, and then wash them away with soap and water.

2. Apply to the hair rather a strong decoction of larkspur seeds (Delphinium staphisagria). This will kill the parasites very quickly. Wash the head with carbolic soap, after two or three days. The nits will then readily come away by brushing and combing.

Iodoform in Orchitis.

The following formula is recommended in orchitis by the *Union Méd.* Iodoform four and vaseline thirty parts. Frictions are to be made with this on the painful testicle in orchitis and neuralgia of the cord, supporting the organ by a suspensory. If mercurial ointment has been previously used, it must be carefully washed off, lest the iodide of mercury, which is a caustic, might be formed.

Pulmonary Gangrene and Death Caused by a Panicle of Grass.

Dr. J. Magrath reports in the *Lancet* the case of a boy of seven who swallowed a panicle of grass. He died twelve weeks subsequently, after much suffering. At the autopsy, it was discovered that one-third of the lower lobe of the right lung was gangrenous; the gangrenous mass was riddled with cavities, in one of which lay the head of grass, blackened, but scarcely altered in consistence. The bodies of two of the dorsal vertebræ were excavated and carious.

Removal of the Whole Uterus, for Cancer.

Sir William Mac Cormac (London *Lancet*) recently removed the entire uterus, for cancer. A cancerous mass involving the cervix uteri, together with a tumor pressing on the rectum, were discovered. Upon abdominal section, the pelvis was found blocked by a tense, fleshy, everywhere adherent cyst, which compressed the rectum against the sacrum and completely concealed the uterus and its appendages. The cyst, which was probably ovarian, contained very offensive pus. The cyst, uterus and ovaries were removed. The vagina was not stitched up. A large double-barreled T-shaped drainage tube was inserted, the end projecting from the vagina, and left in the abdominal cavity; it was used frequently for irrigation. Five days after the operation there was some evidence of suppuration opposite the lower extremity of the abdominal incision. The already adherent edges of the wound were separated, some pus escaped, and the cavity was washed out daily. There was no general peritonitis, and ten days after the operation a speedy convalescence seemed sure. [In connection with this case, the following will possess interest. Some years ago, Dr. Walter F. Atlee operated upon a fibroid tumor of the fundus of the uterus. The tumor weighed seven pounds; an ordinary ovariotomy clamp was placed on the vagina, and the whole uterus and ovaries removed. The woman made a rapid recovery, without any untoward symptoms, and in less than three weeks was able to get up and make her own bed.—Ed.]

What is "Bright's Disease?"

Under this heading the London *Medical Times and Gazette* makes the following pertinent remarks: It is, we believe, currently reported and generally believed that an old fogy of the name of Bright, who was connected with Guy's Hospital some years ago, asserted that he had seen a number of patients, all having dropsy, with albumen in their urine, while after death their kidneys were commonly found to be diseased. These symptoms and conditions he grouped together, and to them certain individuals still more silly than himself gave the name of "Bright's disease." But it is evident that this Dr. Bright had no gift of imagination, for he actually worked long and hard before he came to the trifling conclusions above referred to; beyond all, he could never invent his facts, nor had he the gift of twisting them about so as to prove anything. In short, he was what Americans would call a "very or'nary cuss" after all. But see what has been done since his day! Why, his disease, though it is by the weak-minded still supposed to kill a large proportion of our fellow-mortals, has actually been improved off the face of the earth! First, it was found that the same condition of kidney would sometimes give rise to dropsy, and sometimes not; especially this was noted—that in the same individual dropsy might exist at one time, and not at another; so the dropsy was dropped as one of the necessary symptoms. Then it was found that albumen was not always plentiful in the urine; yea, that it was sometimes absent altogether; so the albuminuria has been got rid of as an essential feature in Bright's disease. Only one thing more remained, and that was the kidney disease, which has now apparently gone the way of all the rest; so that we now have the pleasure of contemplating a disease which no longer possesses any one of the characters by which it was originally distinguished. These are great achievements, doubtless; but destruction comes naturally to mankind. Look at the new theories constructed! Some of the wicked ones, we fear, would, with regard to these, say that the zeal which comes not of knowledge might be better employed even in coining words than in building hypothesis on hypothesis—a kind of tower which has little chance of reaching to the heavens, or, indeed, attaining to any greater height than other fungoid growths similar to itself.

The Sensation of Thirst.

Professor Nothnagel contributed a very interesting and instructive article to a recent number of *Virchow's Archiv*, upon which the London *Lancet* comments, and from which we extract the salient points. It is well known that the sensation of thirst expresses an insufficiency in the amount of water in the organism. But why is thirst referred to the mouth and throat? The scanty experimental researches on the subject teach but little. He relates a remarkable case, which throws some light on the question. A man was kicked in the abdomen by a horse, and knocked down, striking the occiput against the hard ground. He was not stunned, but could not walk, on account of the severe pain in the abdomen and back of the head and neck. Previously well, immediately after the accident he began to feel extreme thirst, and in the next three hours drank five pints of liquid. No injury to bone could be detected, temperature was normal, and pupils small. The local pain soon passed away, but the thirst continued. The

thirst was unabated during the three weeks the patient was under observation. It was uninfluenced by treatment, and became more intense every day about noon. Nothing but large quantities of water relieved it, the amount taken daily varying from one to four gallons. The quantity of urine secreted daily was about three-fourths the amount of water taken, and its specific gravity varied from 1.002 to 1.010. The skin was moist. Nothnagel believed that the thirst must have been due to a central effect of the blow on the occiput. The probabilities, he thought, are that the thirst centre is located in the pons or medulla; though this is only speculation, since there were no symptoms sufficiently distinctive to accurately locate it.

Recurring Lethargy.

The *Lancet* records an interesting case that has been under observation at the Hospice-Général, Rouen. For twenty days a woman, thirty-seven years old, has been in a profound sleep, which is broken every night for a few minutes, when she takes food. The sleep is accompanied by general rigidity. Her first attack was fourteen years ago, and periods of lethargy have since recurred from time to time. During the intervals she seems perfectly well. The onset is always sudden; she goes to sleep in a moment, no matter what she may be doing. Just before the onset she becomes nervous and taciturn. During her sleep the face is well colored and warm, and respiration is regular. About half-past ten o'clock each night the legs begin to tremble, slight groans are uttered, and at eleven she opens her eyes, sits up and eats what is given her, without speaking. She immediately goes to sleep again (the muscular rigidity, however, not reappearing until about four in the morning), and so remains until the next night. On two occasions she has slept for ninety-six hours, without food. She does not lose flesh.

Vomiting of Pregnancy.

At a recent meeting of the Obstetrical Society of Boston (Boston *Medical and Surgical Journal*), this interesting subject was under discussion. Dr. Fifield said that for years he had succeeded in controlling the vomiting of pregnancy, either with bromide of potassium or rectal injections of one-half drachm of chloral hydrate. But recently he had a case under observation in which these measures, as well as others tried, utterly failed to give relief; the trouble growing daily worse, until the woman vomited blood. He then introduced Sims' speculum, drew down the cervix, which was found a little excoriated, and covered it thoroughly with nitrate of silver. Bromide of potassium was then given in ten grain doses every two hours. The next day the patient was well. It was the sense of the Society that the vomiting of pregnancy is due to reflex action.

Hygiene and Public Education.

The *Sanitary Engineer*, commenting on the public school reform of France, by which each department is to have a commission composed of six persons, among whom will be found an architect, a teacher, and an engineer, to whom all plans for school buildings must be referred, says, "It is curious to observe how completely sanitation is ignored in this order." [It is singular that an intelligent nation like France should so neglect this matter of prime importance in the education of her children. This foolish method of training the mind, at the expense of the body, in the light of our present hygienic knowledge, can only be denounced as criminal on the part of legislators, and it really behooves parents to take a hand in the matter, and force sanitary legislation for the welfare of their school children. Let us take an active part in agitating such reform in our own country.—Ed.]

Oral Surgery.

At a recent meeting of the Midland Medical Society, Mr. Bennett May showed a male patient, aged forty years (with specimen), from whom he had three weeks previously removed the tongue, part of the lower jaw, and floor of the mouth in one piece, for epithelioma, some enlarged lymphatics under the jaw being removed at the same time. The patient had made an excellent recovery.

"Our Continent."

Of recent ventures in the field of general literary journalism none has attracted so much attention as "Our Continent." It has made its appearance with little blowing of trumpets, but with an imposing array, not of the names merely, but of the productions of the best writers in America and England. The position it takes is with illustrated weekly journals, but it does not make the reading matter subordinate and inferior to a lot of wood cuts and process engravings. On the contrary, it uses engravings to develop and increase the interest in the reading matter. While in the first instance literary, and hence well supplied with poetry and stories, it is eminently attractive

to the family circle by its admirable departments devoted to housekeeping, social customs, dress, home horticulture, etc., etc. Popular science is also well cared for, and articles on history, biography, etc., are prominent features. Its price is $4.00 a year, and as a family paper it has no superior in our language. For specimen copies, which are mailed free, address "Our Continent, Chestnut and Eleventh streets, Philadelphia."

Special Reports.

NO. III —INFECTIOUS DISEASES (Continued.)

Diphtheria.

Although we recently presented a special report on Diphtheria, we have so much more of interest that a second one will not be superfluous. We have received from the National Board of Health a supplement to their regular bulletin, containing the report of Prof H. C. Wood and Dr. H. F. Formad on the nature of the diphtheritic contagium, and since their labors have been productive of good results, a résumé of their experiments will be given. Their studies were made from a double point of view, namely, clinical and experimental. The bacteria that are present in diphtheritic membrane are identical in form and size with those which are present in the membrane of a non-diphtheritic trachitis, and in the exudation of an inflamed tonsil. They do not hesitate to affirm that it is not possible to determine, even with the highest powers of the microscope, whether an individual micrococci colony, or a mass of such colonies, have come from the surface of a furred tongue, or from an ordinary case of simple throat inflammation, or from one of a diphtheritic character.

A second question, no less important than that just discussed is, are bacteria always present in diphtheria, or only in some cases? In attempting to answer this question, they examined a very large number of cases. In seven cases of what they term "*endemic mild diphtheria*," observed in Philadelphia, the blood was examined *during life*, and in six cases no fungi were found, while in one case micrococci were somewhat abundant in the vital fluid. At Ludington, Michigan, out of fourteen cases of the *severe epidemic* form of the disease, micrococci were found in seven cases, while in the remaining seven they were absent. The cases in which there were no micrococci were all of them very light, or in the stage of convalescence, and the amount of the fungi present in the malignant cases seemed to be proportionate to the severity of the symptoms, and to steadily progress with the disease in the fatal cases. Therefore, they formulate, as established, the proposition that in *endemic mild diphtheria micrococci are always present in the part locally diseased, but are usually not present during life in the blood or in the glandular organs, even in cases which may prove fatal; that in malignant epidemic diphtheria, micrococci are always present in the part locally diseased, and are also usually, and, perhaps, always to be found in the blood and tissues of severe cases, but are frequently, if not usually, absent from the blood of mild cases.* It is very important to know whether the lymphatics and the blood-making organs are the primary seats of infection or not. They are unable to present clinical evidence on this point, but desire to call the attention of investigators to the matter, and state that in animals they found the spleen and bone marrow especially attacked by the fungus. They cannot conclusively state whether or not micrococci are found in the blood in other diseases besides diphtheria, though they incline to the negative view, since, after making a large number of examinations of blood from persons suffering with various diseases, they were only found in three cases other than diphtheria, and all three cases died, two from scarlet fever, and one in childbed, and suffered from sore throat, that Professor Wagner describes under the name of scarlatinal diphtheritis.

MORPHOLOGY.

Great difficulty is sometimes experienced in distinguishing bacteria from other minute organic and inorganic particles. Certain mycelial threads and vibrios, coagulated fibrin, and protoplasmic and fat molecules, often closely resemble micrococci. In zooglea forms the micrococci can at once be distinguished by an experienced eye, as the micrococci of an individual zooglea mass are always uniformly of one size, and are always at the same distance from one another, in contradistinction to albuminous and fat molecules, which vary in size and are at varying distances from each other. Isolated micrococci may vary in size. Micrococci may arrange themselves in pairs and chains; non-living molecules or granules cannot. Micrococci are not soluble in strong acids and alkalies, nor in alcohol and ether, as are fat and most other molecules. Micrococci take the staining well, particularly with hæmotoxylin and aniline dyes, and the aniline dye cannot be so easily washed out as in the case of animal tissues. Beautiful preparations may be made by simply treating sections with a mixture of glycerin and acetic acid, the micrococci be-

coming yellowish brown and prominent amid the perfectly translucent structures. Tincture of iodine is an excellent staining fluid for bacteria within tissues. If first treated with a solution of caustic potash, iodine stains the micrococci deep yellow, while the rest of the tissue is only slightly tinged. The most important distinguishing point between micrococci on one hand and organic and inorganic particles on the other hand is obtained by culture. Micrococci will always multiply, though sometimes much more rapidly than others. They elongate, divide, form chains or zooglea masses if brought into a suitable culture medium.

If the above-mentioned distinctive points are observed, mistakes in recognizing micrococci and other bacteria are entirely out of the question.

In regard to the question of magnifying powers used in recognition of micrococci, they affirm (contrary to statements of some other investigators) that a good one-fifth objective is sufficient for the detection of the diphtheritic micrococci, particularly when appropriate staining is used. They saw no micrococci with a magnifying power of 1500 which they could not detect with an amplification of 500 diameters. For the finer morphological details of micrococci a high magnifying power is required, and they habitually used a one-twelfth Zeiss Homog-Immerson.

They also state that as the result of much experience they are positive that the excessive precautions often insisted upon by authors as necessary in looking for micrococci in the blood, etc., are not, in fact, necessary. Micrococci do not exist in the air to any extent, and exposure of blood slides for a few minutes to the air never is followed by the appearance of micrococci when none have previously existed. This is not true of moving bacteria, which in their early growth they have in some of their former researches mistaken for micrococci, and which may appear rapidly in exposed blood.

A description is then furnished of the methods employed for the artificial cultivation of micrococci, which were used for experimental investigation on animals. In one series of experiments twenty-five cultures were made and all the mentioned culture fluids were tried in this series up to a fourth generation.

The general results of the culture experiment were similar to those of the first series up to the second generation. In the third generation the micrococci already began to fail in growth and multiplication, and the fourth generation yielded a still poorer crop. The cultures were occasionally impure—the rod bacteria supervened.

The regulation of the temperature was sometimes defective during the experimentation with this series, on account of imperfect working of the mechanism of the incubator. Sometimes the temperature fell down to 20° during the night, and it was frequently observed that rod bacteria promptly made their appearance in large numbers during such intervals, and spoiled the cultures. The same occurred with clean cultures when heat was suspended purposely for several days. Those culture tubes, however, which were subjected to a uniform temperature of not below 37° C. did not show any invasion of rod bacteria, and the growth of micrococci continued in the manner described.

The careful measurement of the micrococci in this series, which was best accomplished by measuring the chains of micrococci, revealed a size of $\frac{1}{14000}$ to $\frac{1}{42000}$ of an inch in diameter, the latter size relating more to micrococci in zooglea form. The torula chains were usually made up of the smallest micrococci, approaching in this respect to those of the micrococci balls which they have proven to be formed by the invasion of leucocytes by micrococci.

Some of the experiments performed seem to warrant the deduction that inoculation with materials taken from patients suffering from the endemic mild diphtheria of Philadelphia, frequently produces a secondary or indirect tuberculosis in the rabbit, but very rarely, if ever, causes any disease in the rabbits comparable to diphtheria in man, or even any septic disorder; of course, the experiments do not prove that malignant cases of diphtheria may not occur in Philadelphia and have different relations to inoculation.

The Ludington diphtheritic matter acted as a very deadly poison upon the animals inoculated with it. In three rabbits, portions of the membrane were placed in the trachea, with uniformly fatal results. In three rabbits, membrane placed under the skin or in the muscles acted as promptly as did that inserted in the trachea. The experiments in which the inoculation of membrane had no effect were those in which the poison was placed upon an open surface, where it was liable to be washed off. Such were experiments where the vagina and mouth were selected. In one experiment the membrane was more or less imperfectly retained in position by sewing the eyelid over it, and the result was somewhat doubtful.

In two instances, instead of using membrane, they employed minute pieces of kidney for inoculation, and with precisely the same effect, namely, rapid death, with characteristic lesions.

Injections of minute quantities of blood and saliva into the veins gave, however, entirely negative results, with one very doubtful exception.

It will be seen that the effects produced were entirely different from those which were obtained previously with Philadelphia matter. The results of the two series of experiments may be summed up in a few words, as in the following proposition: *While inoculation of the rabbit with false membrane from endemic or ordinary Philadelphia diphtheria is rarely followed by rapid systemic infection, the placing of material from cases of malignant epidemic diphtheria in the trachea or under the skin is usually fatal; the characteristic post-mortem lesions consisting in the presence of micrococci in the blood, and sometimes also in the internal organs, along with severe inflammation at the point of injury, where there is produced an exudation resembling diphtheritic membrane, and crowded with micrococci.*

With these observations and experiments before us, the question now presents itself, what are the relations of the micrococci which exist in diphtheria to the disease? Are they the poison of the disease? or, in other words, are they capable of producing it? The absolute, final answer to this question can only be made by producing disease in the animal by micrococci isolated from the remainder of the diphtheritic poison. The difficulties to be overcome in such an attempt are very apparent. Still, great as they are, they must be overcome before we can hope to possess any absolutely accurate knowledge of the causative power of the micrococci; before we can determine whether they are the active agents in producing the disease.

It is certain that they produce diphtheritic septicæmia with second generation's culture, and they believe that future research will confirm this, and show that *micrococci cause diphtheria by their power of forcing their way into the tissues and by their own excessive vitality overcoming the vitality of those tissues, changing their nutritive processes, destroying them, and finally getting into the blood itself, destroying its white corpuscles and obstructing the circulation.* While this is their opinion, they do not think that at present it can be considered positively proven that the micrococci themselves are the essential poison, and not simply the carriers of the poison.

Their experiments demonstrated conclusively that after a time the membrane, even if kept perfectly dry, will lose its contagious power.

In finally considering the nature of diphtheria, the facts which have been established should be carefully thought over. They may be stated as follows:—

The micrococci of diphtheria do not differ, so far as observed, from the micrococci of furred tongue, etc., except in their tendency to grow in culture fluids.

The micrococci of furred tongue, or ordinary sore throat, have a less tendency to grow under culture than have the micrococci of endemic non-malignant diphtheria.

The micrococci of endemic or non-malignant diphtheria have a much less tendency to grow under culture than have the micrococci of malignant diphtheria.

The rapidity of growth of the micrococci is in direct proportion to the malignancy of the case yielding them, and its contagiousness.

On exposure to the air diphtheritic membrane of the most virulent type loses its contagious power, and the micrococci *pari passu* lose their power of growing in culture fluids.

Under successive generations of artificial culture, the diphtheritic micrococci lose their growth activity, and also their power of infecting the rabbit.

It has not been experimentally directly proven, but it is a necessary inference from the two facts just stated, that under certain favoring circumstances the sluggish micrococcus puts on growth activity, and, in all probability, *poisonous properties.*

Every grade of case can be found in man, from an ordinary sore throat, through simple pseudo-membranous angina and trachitis, up to malignant diphtheria.

Any inflammation of the trachea of sufficient intensity may cause the formation of a pseudo-membrane.

A case may begin as one of sthenic "pseudo-membranous croup," and end as one of adynamic "diphtheria," with blood poisoning; and in cases of this character not infrequently no exposure to contagion is discoverable, and there is clinically every reason to believe that the blood poison has been developed within the body of the patient. The theory of the disease which they would deduce from these facts is, that the micrococcus which directly or indirectly causes the diphtheria is not a specific organism, different from that common to healthy and inflamed throats, but is an active state of that organism; that certain circumstances outside of the human body are capable of throwing this common micrococcus into this condition of active growth

and engendering an epidemic of diphtheria. When diphtheria is thus epidemic the micrococci light upon a throat, and if the throat have little resisting power, as in the child, inflame it, or increase a catarrh already existing into a violent inflammation, and also rapidly enter the blood and cause systemic poisoning.

On the other hand, a catarrh in a weakly subject may, in the beginning, be simply an inflammation from cold, but the ordinary micrococci in the throat, or mouth, favored by the special conditions, etc., may gradually change from the dormant to the active state, and by and by act upon the throat, and at last force their way into the system, and a self-generated diphtheria be formed out of a "cold."

The essential points of these very valuable investigations have now been concisely stated. Any one who may desire to read the whole report, will find it in full, in the "Supplement to the *National Board of Health Bulletin*," of January 21st, 1882.

Correspondence.

Adherent Placenta—Death from Septicæmia.

Ed. Med. and Surg. Reporter:—

On December 15th, 1879, I was called to attend to Mrs. G. in a case of obstetrics. When I arrived the child was born. In due time I attempted to remove the placenta, as considerable contraction of the uterus was evident, and found it attached, and also hour-glass contraction of the uterus. When I got my hand through the contraction I found the placenta attached, and commenced, with the ends of my fingers, to separate it; the patient struggled and screamed so that I desisted for a short time. My patient began to faint, from loss of blood. In a short time, as I had not removed my hand, I separated the placenta, and removed the whole of it at once;* gave my patient 15 drops fl. ex. ergot, and with application of cold and frictions over the abdomen the hemorrhage was soon checked. In a few days after she took cold and remitting fever, but recovered in a few days.

On the 30th of December, 1881, she again sent for me. When I arrived she was in active labor. Upon examination I found a hip presentation. In perhaps half an hour the child was delivered, to all appearance, dead. As usual in such cases, I put a handkerchief over its mouth and commenced artificial respiration, by filling the lungs with my breath and with slight pressure upon its chest. This I kept up for ten or fifteen minutes when it made attempts to breathe and soon succeeded. Suspecting attachment of the placenta and hour-glass contraction, I attempted to remove the placenta by introducing my right hand into the uterus. I found the same state of things that I did two years before. As soon as I commenced to separate the placenta she put her heels against my arm and gave such a push that I had to let go of the placenta or I would have inverted the uterus, but the cord which I had wrapped around my finger of the other hand was torn off, broken. I then attempted to put her under the influence of ether, but she resisted and pushed my hand away, until I gave that up. After, perhaps, half an hour, she consented to let me again attempt to remove the placenta.

Having fixed myself in such a position that she could not push me back, I made another attempt, and just as I commenced again to separate the placenta, she put her heels up against me and commenced to push me away; but as she could not do that, she screamed at the top of her voice that I was killing her, and my assistant let go of her, and she slid to the head of the bed at the opposite side, so that I had to let go or invert the uterus. I then told her husband to send for another physician, which he did; and in about two or three hours Dr. B. came, and after making a statement of the case to him, it was agreed that I should anæsthetize her, and he should remove the placenta; but, as before, she could not be etherized. Dr. B. then attempted to remove the placenta by piecemeal, but she treated him as she did me: Put her heels against him and forcibly kicked him away, upon which he said there was no use in trying to do anything for her unless she kept quiet. The priest was then sent for, and after attending to her spiritual affairs, she agreed to be put under the influence of chloroform: but after a few inhalations she commenced her struggling again, pushing away my hand and screaming that we were smothering her, and would have thrown herself on the floor if I had not caught her. I then said that they would have to hold her until I would chloroform her; but as her husband and parents seemed to hesitate, and as they let go of her every time when she would commence to struggle, Dr. B. said we had no right to force her, as she was a reasonable being; she had a right to have her own way; in which her parents seemed to acquiesce. Dr. B. and the priest then went home, and I remained with her till morning, when I made another examination. The parts seemed favorably disposed, but she had a bloody, serous discharge, of a very offensive character, after having had a chill a few hours before. She could not be persuaded, and utterly refused to let any more attempts be made, either to be put under the influence of chloroform or let another attempt be made to remove the placenta. She said she would rather die than to suffer every time in having the after birth removed, when she was confined. I told her I would not stay any longer, as there was no use of my staying when I was hindered from doing the only thing that would save her. Dr. W. afterward saw her twice, I believe; but she died of septicæmia on the 2d of January.

The first time this unfortunate woman was confined she had an irregular, who, when he found attachment of placenta, said he would not shoulder the responsibility alone. Dr. Walker, of this place, was sent for. The Eclectic held her and Dr. Walker got most of the placenta re-

* See my article in the Reporter, January 5th, 1870, on attached placenta.

moved by piecemeal, at last. She recovered after having been confined five or six weeks.

E. A. OPPELT, M.D.

Loogoote, Ind., Jan. 22, 1882.

NEWS AND MISCELLANY.

Longevity.

The obituary column of the London *Times*, Jan. 24th contained some remarkable illustrations of prolonged existence, in eight persons, viz., five gentlemen and three ladies, whose united ages amounted to 685 years, giving an average of 85 years and 7 months to each. The oldest, as usual, was a lady, who had reached the great age of 93, the youngest of the same sex being 83 years of age; of the gentlemen, the oldest was 90, and the youngest 81 years of age. The same obituary recorded the deaths of ten septuagenarians, averaging 76 years and 1 month each. That a single day's obituary should record the deaths of so many as eighteen persons averaging the patriarchal age of 80 years and 4 months, is most remarkable.

American Illiteracy from an English Source.

The London *Medical Times and Gazette* says: A summary of an official table has been published, giving the statistics of illiteracy in the United States, from which it appears that in New York the percentage of the total population who cannot read is 3.28, in Pennsylvania 3.41, in Connecticut 3.37, in Massachusetts 4.24, in New Hampshire 3.45, in Vermont 3.91, in Rhode Island 6.31; while the figures for Maine are only 2.80. The unfavorable percentage shown in Massachusetts and Rhode Island is stated to be caused by their factory system and the importation of cheap labor from Canada and other parts of the world.

Vaccination Notes.

The Pennsylvania Railroad requires a certificate of vaccination from every laborer in its employ.

The City Council of Richmond has passed, over the Mayor's veto, an ordinance requiring all persons not vaccinated within twelve months to be vaccinated.

Female Doctors in Russia.

The female candidates for entering upon the study of medicine in Russia keep ever increasing. The normal number of admissions is fixed at seventy, but the actual number of applicants now amounts to more than double that number. The total number of female students that have been admitted within ten years have been 959, and of these 281 appear to have terminated their studies, and 152 been admitted to the practice of medicine.

Items.

—A boy nine years of age recently died from the effects of chloroform, administered in the Children's Hospital at Manchester, England.

—Daniel Webster once took a young lady to task for wearing short sleeves, and reflected severely on bare arms. "Why, Mr. Webster," exclaimed the young lady, "I'm astonished that you, the great expounder of the Constitution, should object to bare arms!" "What has my expounding the Constitution got to do with it?" growled Daniel; to which the young lady replied, "Does not the Constitution say that the right to *bear arms* shall not be interfered with?" History does not record the effect of this shot, but Webster died that same year.

—A western paper makes mention of a place in the far West destined to be the "Mecca" of bald-headed men, since, owing to some peculiarity of climate or water, the most luxuriant growth of hair is soon produced upon the baldest heads. This must be truly a most extraordinary place.

—Sir Erasmus Wilson, President of the Royal College of Surgeons of England, has given $50,000 for the purpose of founding a chair of Pathological Anatomy in the University of Aberdeen.

I Pede Prospero.

The following is from the London *Lancet*:—

A glad good morrow to my friend,
Of the great Æsculapius noble son!
To his famed votary, oh send
Success in years to come!

May great prosperity attend
His ceaseless efforts to amend
The suffering and pain and grief
In this sad world. What a relief
To feel that life is spent in doing good!

Though weary oft, take courage!
The noblest aim will triumph in the end,
For youth will bless, and hoary age will lend
A voice to speak thy praise!

Go on and prosper; may each year increase
In joy and hope, till crowned in the end
By well-earned laurels.
Such the good wishes that I fain would send,
With many a glad good-morrow, to my friend.

M. D. M.

QUERIES AND REPLIES.

E. T. S., of Fla., asks for the best local treatment for spinal irritation, to allay pain, etc.

P. O. G.—Fournier's work, entitled, "Syphilis and Marriage;" translated by Dr. Morrow, has been published, and we can send it to you. Price $2.00.

MARRIAGES.

McKNIGHT—LOUNSBURY.—On Wednesday, Feb. 16, at the residence of the bride's parents, Kingston, N. Y., by the Rev. J. G. Van Slyke, assisted by the Rev. Dr. Demarest, Kate DuBois, daughter of the Hon. Wm. Lounsbury, and Dr. Charles Scott McKnight, of Plainfield, N. J.

VESTAL—PRIDE.—On Tuesday evening, Feb. 14, 1882, at the house of the bride's mother, Mrs. Letitia Diffenbaugh, by Rev. J. D. Boone, of Morrelton, Arkansas, V. S. Vestal, M.D., and Miss Nannie E. Pride, all of Dripping Springs, Arkansas.

DEATH.

BRIDGES.—On the 20th inst., Robert Bridges, M.D., Emeritus Professor of the College of Pharmacy, in the seventy-sixth year of his age.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1306.] PHILADELPHIA, MARCH 11, 1882. [Vol. XLVI.—No. 10.

Original Department.

Lecture.

CONCUSSION OF THE BRAIN.

Delivered before the Paris Faculty of Medicine,
BY M. DUPLAY,
Professor of Surgery.

Gentlemen—The further we advance in the study of cerebral lesions, the more difficult our task becomes, and the more interesting the subject.

We have studied together the wounds of the scalp, and the traumatic lesions of the subjacent cranium; we have been fully satisfied, too, in concluding these researches, that we have established clearly the intimate relations existing between these lesions and the symptoms observed.

We are to consider, to-day, a more delicate subject, those traumatisms which have a direct influence on the brain itself; for, besides the direct wounds with which we are already conversant, the brain may be affected in various ways by traumatic lesions; in a word, there may be concussion, or contusion, or compression of the brain.

The older surgeons were but little conversant with the lesions of this organ of which I am about to speak.

The first attempt at a symptomatic description of cerebral concussion was made by Boirel, in 1677, who tried to separate it from the other lesions of the organ. This distinction reappeared in the works of Sabourand and J. L. Petit, and was definitely accepted by the old Académie de Chirurgie. Later, Boyer, and particularly, Dupuytren, established, in connection with concussion and compression, the symptomatology of contusion of the brain.

But, if this division of cerebral lesions, established by men eminent for clinical observation, appeared to respond to as many clearly separated morbid conditions, the symptoms were not fixed, nor the lesions clearly defined, and this part of surgical pathology, together with its pathological physiology remained exceedingly obscure.

It is only within the past few years, through the remarkable advance in our knowledge of the pathological physiology of the nervous centres, due to well-directed observation and experimentation, that it has been possible to define anatomically and characterize by symptoms peculiar to each, the different traumatisms of the brain. Among the more important modern works must be cited that of M. Duret, prosector to this Faculty.

CONCUSSION OF THE BRAIN.

Concussion of the brain is characterized by a special collection of symptoms, consisting in an alteration, more or less marked, of intelligence, sensibility and movement, which supervenes immediately after the injury, and presents this peculiarity, that if death does not immediately ensue, all the morbid symptoms gradually disappear. For a long period it was generally admitted that this set of symptoms had no connection with any appreciable lesion, and resulted simply from the shock sustained by the encephalic mass; but these hypotheses of transmitted oscillations and vibrations are at present almost abandoned, and we will see, as we progress in our study, that modern works tend to explain differently the phenomena of concussion. Perhaps, then, it will be possible to complete this purely symptomatic definition of concussion.

Concussion is said to be direct when the injury affects the cranium itself; indirect when it supervenes after a fall on the feet, the knees, the pelvis, or the face.

The symptoms attributed to concussion are multiple and complex, and have been divided into three classes, somewhat arbitrarily separated, and based on the gravity, more or less marked, of the functional derangement. In the first degree, or slight concussion, following a blow or fall, the patient is giddy and confused; there is ringing in the ears; vision is disturbed; the face suddenly becomes pale; respiration is one moment arrested, and the individual becomes faint and weak. Then, after a very short time, a few seconds, or a few minutes, rarely more than a quarter of an hour, the patient comes to himself and has but a very vague recollection of the accident; there remains, however, some dullness of comprehension, and a sensation of great fatigue, which may last but for a short time, or for several hours.

The gravest degree of concussion follows a more violent traumatism, and is characterized by the following symptoms; the patient falls insensible and motionless; he remains in a state of coma; pulse and respiration are hardly perceptible; the evacuations are involuntary, and death supervenes promptly, by a sort of gradual extinction of the action of the heart and lungs.

Between these two extreme degrees there is one intermediary, called grave concussion, of which the symptoms differ widely, according to the intensity of the traumatism: loss of consciousness, more or less complete abolition of general and special sensibility, complete muscular relaxation, dilatation of the pupils, involuntary evacuations, while the face is pale, pulse very small and slow, respirations few and far between. In some cases there have been but twenty pulsations per minute.

After a few hours or a few days the morbid symptoms become less intense, but the return to the normal condition is gradual and very slow. Generally the intellectual faculties are reëstablished more slowly than the motor and sensory functions; this is an important point to bear in mind. The patient remains for some time confused, the memory particularly being defective.

I have passed very rapidly, gentlemen, over the symptomatology of concussion, which you will find well and completely considered in your works on external pathology, as I wish to arrive at the less known and more interesting part of the subject.

ANATOMY AND PHYSIOLOGICAL PATHOLOGY OF CONCUSSION.

To what anatomical condition does this set of symptoms correspond? This question has long remained unanswered. As the autopsies of patients who succumbed in this state revealed no lesions to Littré, Sabatier, Boyer, or Meunier, it was considered that cerebral concussion consisted in the shock sustained by the brain in all its parts, without any appreciable lesion except the close packing together (tassement) of the nerve fibres.

Gama even sought to prove the correctness of this doctrine by experimentation; he poured isinglass into a thin globe of glass, and then by percussion obtained oscillations of the diffluent mass, which he compared with the oscillations of the brain in concussion. As if the brain, incompressible and adherent at certain parts, divided into hemispheres and lobes separated by tense networks of fibrous tissue, presented any analogy with a diffluent mass of isinglass.

Then other authors, with Deville and Prescott Hewett, brought forward cases in which lesions were found at the autopsy, a rachidian hemorrhage in Deville's case. Somewhat later, Fano, having instituted experiments, which consisted in suddenly killing dogs by a blow on the head, and having always found hemorrhagic effusion at the base of the cranium, concluded that concussion does not take place, and that the symptoms ordinarily ascribed to it are due not to concussion, but to a contusion of the brain, or to hemorrhagic effusions situated principally at the base, and inducing compression of the bulb.

In fact, all these suppositions were far from conclusive, and opinions on the subject were extremely vague. Our ignorance regarding the nature of concussion was almost complete. This was the state of affairs when I composed my treatise on surgery; nevertheless, as clinical observation compelled me to admit the existence of concussion as an affection proper to the brain, I was opposed to its exclusion from the list of diseases of this organ. I also expressed the opinion that research should be directed toward the bulb, to find the material lesion of concussion. I considered also, that a shock might determine "a sudden and more or less persistent ischæmia of the whole or a part of the brain, of a nature to induce the symptoms observed."

These were simple deductions from clinical observation. Since that epoch experimentation and observation have proven the reality of this opinion. In a series of experiments made under the most satisfactory scientific conditions, M.

Duret has permitted us to respond to this debated question, explaining the mechanism of concussion, and creating and demonstrating in a general way the pathological physiology of cerebral traumatisms.

Seeking the causes and mechanism of cerebral concussion induced by sudden injections into the interior of the cranium, M. Duret succeeded in reproducing the clinical forms of concusssion. Considering that the slowing up of the respiration and pulse, and the abolition of intellectual phenomena, are the most marked symptoms, and reflecting, on the other hand, that, according to the most recent physiological researches, the bulb is the centre of cardiac and pulmonary life, that it contains the fibres which place the intellectual centres in relation with exterior objects, M. Duret was led to seek for the lesions of concussion in this portion of the encephalon.

In order to exaggerate the shock on the cerebral hemispheres, and, consequently, the lesions it determines, he injected suddenly, through a small aperture, into the cranium of a vigorous dog, three ounces of liquid. The dog was killed immediately afterward, and at the autopsy was found an enormous dilatation of the aqueduct of Sylvius and of the central canal of the medulla, and besides this, the floor of the fourth ventricle had been torn (éclatement). On careful examination of this tear, M. Duret remarked that the parietes were turned outward, as if the tear was produced by a force acting from within outwardly, that is, from the interior of the ventricle toward the exterior; and he thence concluded that, through the considerable pressure suddenly brought about on the surface of the cerebral hemispheres, the cerebro-spinal fluid contained in the lateral ventricles had been suddenly expelled through the aqueduct of Sylvius, which was dilated and torn, into the fourth ventricle, which being thus over distended and presenting but a small external orifice, was suddenly split.

In order to prove that this lesion was really due to the cerebro-spinal liquid driven back by the experimental traumatism, and to prevent the objection that the lesion was produced by the injected liquid, M. Duret repeated the same experiment with a colored liquid susceptible of coagulation; "the same lesions were reproduced."

But it is yet necessary to demonstrate that this sudden driving back of the cerebro-spinal fluid, produced by the injection of a coagulable liquid on the surface of a hemisphere, exists really in traumatisms which affect the cranium.

The experiments of Brün and Felizet have abundantly proven that the cranium is in a great measure depressible and elastic; that there is produced a "cone of depression" at a percussed point, while at the opposite extremity of the axis of percussion there is produced a "cone of elevation (soulevement)."

We can, then, no longer deny the displacement and exaggerated tension of the cerebro-spinal fluid, since the blows and falls on the cranium flatten at one point the osseous envelop of the encephalon, which is itself incompressible. As we know, on the other hand, that the cerebro-spinal liquid has its source in the very fine membranes which surround the smaller arterioles of the brain substance, and that from thence it is spread over the periphery of the encephalon in the sub-arachnoid space, penetrating into the ventricles by the great fissure of the cerebrum, and descending thence toward the fourth ventricle and the central canal of the medulla by the aqueduct of Sylvius; since, as I say, these anatomical facts are known to us, it would seem natural to admit that the first effect of any augmentation of tension in this liquid would be to force it back toward its points of origin, and on the other hand toward the natural outlets. M. Duret has characterized this phenomena by an appropriate term, the cerebro-spinal shock (choc céphalo-rachidien).

If this shock has been of medium intensity, as happens in a certain number of clinical observations, the lesions will consist in a simple augmentation in the tension of the cerebro-spinal liquid and a momentary compression of the vessels of the brain substance. But if the shock is more violent, the liquid is of a sudden forced back into the lymphatic sheaths (gaines) and causes rupture of the smaller capillaries. These lesions of concussion are first evident at the part where the shock is most direct, at the "cone of depression," after that at the opposite extremity of the axis of percussion at the "cone of elevation," and at certain other parts of the surface of the brain. Again, as the shock is communicated to the entire mass of the cerebro-spinal liquid, it suddenly distends the sub-arachnoid space and its diverticuli, and the vessels there contained are ruptured. No matter where the shock commences, if it be violent, the liquid is driven back in the cavities of the ventricles in a certain manner; from the lateral ventricles it passes into the middle, and thence by the aqueduct of Sylvius into the fourth ventricle, which it distends and bursts open; this is why, in such cases, hemorrhagic effusions are found at the surface and in the substance of the bulb.

Since, then, the clinical symptoms of concussion are in exact correspondence with the lesions observed, there would seem to exist no possible objection to this doctrine of the mechanism of cerebral concussion.

There exists in the symptomatology of concussion a symptom rarely observed in practice, and which is never wanting when this condition is produced experimentally; it is a species of generalized tetanism of the voluntary and involuntary muscles, and particularly of those of the vascular system. This generalized contracture is evidently of reflex origin, and we have already demonstrated that the shock on the cranium is transmitted principally to the bulb, and to the entire encephalon; you have even been able to see the lesions of this organ.

You are also aware that there exists one part of the bulb, the restiform bodies, the irritation of which gives rise to tetanic effects not observed in other parts of the bulb. We can, then, safely conclude that this generalized tetanism is due to irritation of the restiform bodies.

This spasm, which affects particularly the muscles of the vascular system at the moment of the shock and for a few minutes afterward, is demonstrated by the elevation in arterial tension, which is most marked when the shock is violent (experiments of Duret and Franck). Duret has shown this specially for the vessels of the brain, by measuring the tension of the blood in the jugulars; at the moment of the shock it suddenly falls. If a final proof is wanting of this sudden cerebral anæmia, I would say that the movements of the brain, which are the result of arterial expansion, of the dilatation of the intracerebral vessels (Bech, Franck, Mosso, Salathé) are suddenly arrested at the moment of the shock (Duret).

Thus are explained the loss of cerebral functions, intellect, movement, sensibility, the sudden arrest of pulse and respiration, the troubles of calorification, etc.

In the second phase, there is general relaxation and complete resolution; to the spasm has succeeded paralysis of the entire vascular system, particularly of the cerebral vessels.

It is a law of general pathology, that any irritative lesion of the tissues determines first spasm and then paralysis. The flow of blood in the dilated capillary vessels about the nerve elements becomes slower, thence ensues the comatose state, and the dullness of intelligence, motion and sensibility, remarked in clinical observation.

The persistent troubles of intelligence, motion and sensibility are due to some material destruction of the parts, and are observed when the shock has been of great intensity. I do not wish in this lecture to speak of the third degree of inflammatory reaction, which will be considered when we treat of traumatic meningo-encephalitis.

We have seen, then, gentlemen, that the diverse troubles, variable as regards their intensity and duration, observed in cerebral concussion, can all be explained by the lesions determined by the sudden displacements and consequent changes in pressure in the cerebro-spinal fluid.

These lesions are, 1st, a simple augmentation in tension of the cerebro-spinal fluid, which induces momentary cerebral anæmia, or ruptures of the capillaries of the brain and pia mater, or, 2d, ruptures of the brain substance.

Every traumatism affecting the cranium has a more or less serious effect on the bulb, by the intermediary of the cerebro-spinal fluid.

We can now, then, complete the definition of concussion given at the commencement of this lecture. The designation concussion is given to a collection of nervous troubles of very variable duration and intensity, due to the reaction on the cerebral circulation and brain substance, brought about by the modifications in intensity and displacements of the cerebro-spinal fluids.

Communications.

PHYSICAL ASPECTS OF INFANTILE UNFOLDMENT.

BY THOMAS S. SOZINSKEY, M.D., PH.D.,
Of Philadelphia.

The nature of the young, but especially of the very young, is a branch of physiology which deserves much attention, far more, doubtless, than it receives. However this may be, it is certain that without a proper understanding of it, infantile welfare cannot be promoted, nor infantile diseases treated naturally and successfully.

It is extremely probable that many physicians, like people generally, know less than they suppose, about children. The manifold aspects of a child, physical and mental, constitute an extensive and complex branch of study. A child is indeed a difficult subject to fathom. How does it unfold physically? How does it unfold mentally? At what rate should it unfold physically? At what rate should it unfold mentally? What are the conditions suitable for its proper physical unfoldment? What are the conditions suitable for its proper mental unfoldment? How many, or perhaps I should say who, can answer these questions?

To some aspects of the physical unfoldment of infants I invite the attention of the reader in the remarks which succeed. What I shall say will have for a basis items of a record of observations made recently on a male child, during its first year, who was healthy and of about average size at birth, and who was cared for in all respects as hygienically, perhaps, as it is possible for a child to be. Of the observations, I may remark that, altogether, they may be taken as reasonably accurate. They were noted down week after week, as made. The peculiar relation of the observer to the child on whom they were made did not, I feel sure, tend to render them inaccurate.

It is proper to state, to begin with, that the child—an only one—is of healthy parentage, and of Anglo-saxon ancestry, free from constitutional diseases, and on the father's side, at least, extremely long lived; and that his parents are each in the prime of life, and each of about medium size, the mother being somewhat thin and the father somewhat stout. So much by way of pedigree for the child—a matter of great significance.

Now it may seem incredible, but it is nevertheless a fact, that in all the voluminous records of science, medical and otherwise, there is not, so far as I know, a complete record of the increase in weight and height, even from month to month, of a child that was healthy and well developed at birth and cared for hygienically in all respects, from day to day. This is almost equivalent to saying that there is no standard by which parents or the physician can judge of children, whether or not they are growing properly. I am aware that there are some records of features of the unfoldment of children, particularly as met with in institutions; but I believe every one will agree with me, when I say that the record of the unfoldment of such children is not a record of the unfoldment of children under proper conditions. A normal, or typical unfoldment of a child must be sought for elsewhere. If one is taken as a criterion, or standard, it should be one that was sound at the start, and that has been managed hygienically all along.

The efforts which have been made to delineate numerically the physical unfoldment of infants can be easily recounted. M. Bouchut made an approximate estimate of it, which he recorded in 1874, in the *Gazette des Hôpital*, No. 78. Dr. Hæhner made a record of the height of a healthy child of his at different periods during the first year, which may be found in the number of the *American Journal of Obstetrics*, for October, 1880. This is the only record of the increase of height, from time to time, with which I am acquainted, and it is not presented in a very practical shape. Dr. Etienne Evetsky, published in the New York *Medical Journal*, for February, 1881, an elaborate article on the results of an extended series of observations on the increase in weight, from week to week, of a large number of children during their first year, in the New York Infant Asylum. This is a valuable production, but I think that the author would hardly regard his figures as a standard by which to judge of the growth of healthy children hygienically reared. These articles embody all the precise information there is, or rather, that I am acquainted with, in regard to the increase in weight and height from time to time during the first year of life.

The vulgar belief that if a child is weighed or measured it will not live long, may account, in some measure, for the remarkable absence of records of the physical unfoldment of children. It would be well for every one's mind to be disabused of this strange superstition. The only ground for it, that I can imagine, is, that few or no observations of the kind have been made on any but sickly children—the sickliness prompting this attention. It would be wise to weigh all children every week or two, during at least the first year; for in this way only can it be determined precisely whether they are thriving evenly and sufficiently. In the light of such observations, faults in the conditions of existence of children can be discovered, and to some extent the presence of disease detected. For when an infant does not increase in weight at a due rate, it is a sure sign that there is something amiss. And having notice that something is amiss, a careful search will generally reveal what it is, and an intelligent effort will mostly remove it.

The following table gives the weight (including clothing) and height (or length, if any one prefers the word) of the child referred to, with approximate exactness, at birth, and at the end of each month of its first year :—

Age.	*Weight.*	*Height.*
At Birth	8 lbs.	19 inches
1 month	11 "	20½ "
2 "	14 "	22 "
3 "	16½ "	23¼ "
4 "	17¾ "	24¼ "
5 "	18¾ "	25 "
6 "	20 "	26 "
7 "	21 "	26¾ "
8 "	22 "	27½ "
9 "	22¾ "	28 "
10 "	23¾ "	28¾ "
11 "	24¼ "	29½ "
12 "	25 "	30 "

It will be observed that at birth the child was eight pounds in weight and nineteen inches in height. This is no more, in either respect, than most male children are; it is probably not above the average of the healthy. Girls are somewhat less in both respects.

At three months the child's weight was sixteen and one-half pounds, which is over twice the original weight. This is the increase which a fairly developed child is usually said to make in the first six months, and not a few fail to exceed it within a year. Here the weight was over three times as much at eleven months as what it was at birth. Children that are very heavy at birth, say twelve pounds, rarely treble their weight within their first year; indeed, they generally do not do much more than double it.

The rate of increase in weight and height of the child was greatest during the first three months. For over three months there was a daily gain of over an ounce. The rate of increase during the fourth month was about two-thirds of an ounce daily. During the fifth month it was less, the falling off being produced, possibly, to some extent, by the cutting of two pairs of incisor teeth. The increase during the sixth month was nearly as great as in the fourth. During the seventh and eighth months it was somewhat over half an ounce daily. Warm weather may have had something to do in keeping it down during the seventh month. During the ninth and tenth months it was about two-fifths of an ounce daily; and during the eleventh and twelfth months somewhat less than two fifths.

According to M. Bouchut, a child should gain 6.63 ounces weekly during the first month, and each month subsequently .44 ounces less than this per week till the end of the year, the increase then being 1.76 ounces weekly. Such an even decline in the increase is not met with probably in any case. However, according to this rule, a child weighing eight pounds at birth would weigh at the end of three months about thirteen pounds; at the end of six months about seventeen pounds; at the end of nine months about twenty pounds; and at the end of twelve months about twenty-one and a half pounds.

An examination of the table will show that there was an increase in both weight and height every month. Such, indeed, was the case week after week, without exception, I believe.

The proportion existing between the weight and height is deserving of very careful study, for, from the fact that some children are naturally of larger growth than others, the relations between the age and weight is a sufficiently poor standard by which to judge of the condition of children at any time. The figures given indicate that in the child's case there was an increase of about an inch in height for every increase of a pound in weight, except during the first three months, when it was less. The increase in height was possibly greater than it is in the majority of children. The average height of healthy children at the end of the first year has been given approximately as twenty-six inches; but this is considerably too low, I believe. Dr. Hæhner's child was almost thirty inches.

An English physician, Dr. Percy Boulton, in an article on observations made by him, read, two years ago, before the Harveian Society, and which has attracted wide attention, lays great stress on the importance of observing the proportion between the height and weight of children. He states that no difference what the rate of increase in height in different cases may be, "weight for height should be in each case identically the same." This rule possibly applies in children under three years of age; but Dr. Boulton's conclusions were based on observations made on children three years and upward. The Doctor found that "between three and four feet the increase in weight should be two pounds per inch, and between four and five feet two and a half pounds per inch." He states that a healthy, well-developed child is about three feet two inches in height and forty pounds in weight when three years of age. It would seem that the increase in weight per inch is much less during the first year than subsequently.

It may not be amiss to say, in this connection, that it should be borne in mind that the character of all children's tissues is not alike. Some have an excessive proportion of fat. Such children are flabby and inactive. The child whose measurements are given was not markedly fat at any time, and he was extremely active and strong all along. He received more exercise, probably, than most babies.

I will now give, as a matter of interest, a statement of the weekly increase in weight among the children in the New York Infant Asylum, as determined by the series of observations made under the supervision of Dr. Evetsky. The Doctor found that the average weight at birth was 7.176 pounds; that the average weekly increase during the first month was 2.53 ounces in spite of an actual decline of 1.08 ounces during the first week; that during the second it was 5.79; that during the third it was 5.12; that during the fourth it was 4.69; that during the

fifth it was 4.26; that during the sixth it was 3.39; that during the seventh it was 1.91; that during the eighth it was 3.46; that during the ninth it was 1.70; that during the tenth it was 1.69; that during the eleventh it was 2.63; and that during the twelfth it was 3.04.

Commenting on the result of his observations Dr. Evetsky says, "It will be seen that the child loses during the first week; then the growth rapidly increases, reaching its maximum during the seventh week. During the third, fourth, fifth, sixth and seventh months its energy declines, gradually at first, and more rapidly during the last two months, with the exception of the twenty-fifth and twenty-ninth weeks, when the growth is more active, reaching the lowest point during the twenty-eighth, twenty-ninth and thirtieth weeks. In the course of the following seven weeks (the eighth and ninth months), the growth is again more active, but it declines from the thirty-eighth to the forty-first week. From the forty-second week to the forty-fifth the child grows again with more vigor, which remains almost the same up to the end of the first year, with the exception of the forty-sixth, forty-seventh and forty-eighth weeks, when it is somewhat depressed."

In explanation of the manner of growth observed by him, Dr. Evetsky says: "The study of the growth of children during the first year leads to the following conclusions: Early childhood is composed of a number of distinct periods, of which the first is the *transient* (transition?) period, when the child's nutrition undergoes a change from the normal intra-uterine to the normal extra-uterine type. The pathology of this period rests upon the inadequacy of the feeble and imperfect efforts of assimilation to meet the requirements of the energetic nutritive processes. The second period is that of *normal extra-uterine nutrition*. After this there is a succession of three *dentition* and *inter-dentition* periods. The pathology of dentition rests upon the irritating influence of teething being transmitted to the nerve centres, producing certain disorders in the general and local nutrition and leading to a disposition to disease, or constituting the actual morbid processes. During the inter-dentition periods the child's health returns to the normal state. The growth of the child is not a process of itself, neither is it governed by its own laws, but is a faithful and correct representation of the child's general well being. Consequently, its great clinical importance should be recognized. As information derived from weighing the child relates mainly to the state of the nutritive processes, while the linear measurements give us information concerning the energy of cellular life, both methods should be used concurrently in the study of this branch of pædiatric physiology."

Dr. Evetsky's remarks in respect to the effect of dentition on growth are, perhaps, much too emphatic; still, even in healthy children under hygienic influences the process has considerable effect, as a rule. In very many children met with in practice, the cutting of the teeth has undoubtedly a decidedly disturbing effect on the general health.

A few special features of the child's physical unfoldment will now be spoken of briefly.

Toward the end of the third month the child could readily and firmly hold in his hand any object placed therein. Two weeks later he began to put objects other than his fingers in his mouth. At five months he could easily reach out his hand and take hold of objects. Midway between the third and fourth month he could turn his head to observe objects. On the day he was six months old, it is stated of him in the record, that he "is able to sit up unsupported"—an ability which is commonly said to be acquired some time in the third quarter. Ten days before he was eight months old he could stand up cleverly when he had any point of support to cling to. At eight months he could crawl easily from point to point—an exercise in which he was allowed to indulge freely. A few days before he was ten months old he could stand alone, and a month later made slight attempts to walk, but walking was not fairly begun until he was a year old. If he had not been an expert creeper it is likely he would have walked sooner, for a good creeper is very sure to be disinclined to resort to a slower mode of locomotion. Many children walk before they have completed their first year.

When the child was four and a half months old one of the two middle incisor teeth of the lower jaw made its appearance. This is early, but not remarkably so for a child whose bony system is well developed. The old assertion, retailed so confidently in the books, that "dentition commences about the seventh month," to use the words of Paulus Ægeneta, does not hold good in the majority of cases. It not infrequently begins as early as the fourth, and sometimes as late as the tenth month. Another notion which does not hold good in a large proportion of cases is that the teeth come in pairs, the upper ones first. However, in this child's case the whole eight incisors were present when he was eight and a half months old. While they were coming through he seemingly suffered but little. In

some cases the lateral incisors are not present until the sixteenth month, or even later. It was only the other day that I had occasion to lance one in the lower jaw of a girl over sixteen months, in whom, by the way, the four small molars, two in either jaw, had been present for over a month. The cutting of the child's upper double teeth began when he was just eleven months, which is a year earlier than it is in not a few children. It troubled him somewhat; he was slightly feverish and restless, and a little inclined to have catarrh, with some disturbance of the alimentary apparatus. At the end of his twelfth month a molar on either side of the lower jaw were just appearing.

An entry in the record, made when the child was one year old, reads as follows: "So far he has not been affected with any disease whatever." It might be said that he did not suffer once from even a decided cold, colic, skin eruption, or chafing. It is a common idea, in the nursery at least, that every infant may be expected to have repeated attacks of colic. This is a mistake; no child who is free from disease at birth should ever suffer from colic. When a child is so affected, it is, as a rule, palpable proof that the nourishment it is receiving is not good, or that it is overfed, or that there is something else at fault in its case. It is not too much to say that if a child free from hereditary disease suffers habitually from colic, it may be reasonably assumed that its attendants are not performing their duty intelligently and faithfully.

Another entry made at the end of the child's first year reads as follows: "He has not cried five minutes continuously since he was born." As a matter of fact he never cried half that time continuously. Yet he was always very spirited; his abstinence from crying was not due to natural apathy. Really no child that is well and wisely cared for is ever inclined to cry. Pain and irritability of temper are the main causes of the crying of children; and these will not be present, as a rule, if the management is of the right sort.

Here is still another interesting item of the record inserted at the end of the year: "For many months the child has had, as a rule, but one alvine evacuation daily. In his early months there were seldom more than two, and frequently only one." I am disposed to believe that this is as it should be; in spite of statements enough to the contrary, it is not natural for an infant to have three or four evacuations daily. It nearly all depends on the quality and amount of its nourishment. The child's mother led a perfectly regular life and lived on simple fare, the main item of which was milk; and she fed him, for the most part, at set periods. Up until the end of the first year his nourishment was derived from the breast exclusively.

A few additional facts in regard to the child's condition at the end of his first year may be given. The circumference of his head was 18¾ inches, of his neck 8, of his chest (without clothing) 19, of his forearm 6, and of his leg 7¼. His pulse at various hours, on many different days, when awake, was at or near 140 per minute. When asleep it was about ten beats less. In the books it is said that the pulse of a child during the first year is from 115 to 130 per minute.

Besides the influences referred to, or hinted at, as bearing on the unfoldment of children, there is one about which I cannot refrain from saying a few words before concluding. The influence to which I refer is that of the seasons. Unless an infant is very wisely cared for, both the heat of summer and the cold of winter are apt to have a retarding effect on the growth. If the heat of summer, however, does not produce prostration of any account, it is then that growth progresses most rapidly, as one might expect. The child the facts of whose physical unfoldment I have given was born on the 29th of January, 1881. The heat of summer did not apparently have any prostrating effect on him at any time.

PLACENTA PRÆVIA.

BY J. D. STRAWBRIDGE, M.D.,
Of Danville, Pa.

Early in the summer of 1851 a woman ran crying from a house which I at that moment happened to be passing, and I turned to see what was the matter, when, recognizing me, she exclaimed, "Oh! Doctor, come up quick, Mrs. L. is dying." Following up stairs as rapidly as possible, I found the patient lying on her left side, her back toward me, near the edge of the bed, through which blood flowed in a stream to the floor. I inquired, "Is she in labor?" and the reply, "I guess so," was scarcely given, when a torrent of blood poured over the side of the bed, flooding for some distance the uncarpeted floor. A low, stifled moan, gasping breathing, ineffectual efforts at vomiting, the blanched face, and almost complete unconsciousness, showed clearly that there was no time to lose. I instantly threw off my coat, bared my right arm, and introducing my hand into the vagina, through a relaxed and easily dilated vulva, passed my finger rapidly around inside the os, which I found relaxed and dilated to nearly two inches in diameter, and through which a mass of placenta

presented. I searched for some point of detachment by which to reach the membranes, but found the placenta firmly adherent all around to within little more than half an inch of the edge of the os. The fœtus could be felt through the placenta, but moving so freely in the abundant waters as to evade the touch, and prevent the presentation being ascertained. Finding a slight break in the presenting placental mass, directly across its centre, without hesitation or a moment's delay, I thrust my hand in this opening, through the placenta into the uterus, giving exit to a large flow of waters; grasping the vertex, which came at once into my hand, I gave it a turn to the left, then placing my finger in front of the right shoulder, while the waters were still discharging, rotated the body on its axis until the feet were brought nearly to the front, where they were easily reached, the child turned and delivered, within ten minutes from the time I entered the room. The secundines, inverted through the torn placenta, followed immediately after the head. The child, which was in the beginning of its seventh month, showed no signs of life, and no effort was made to resuscitate it. As soon as it could be laid to one side, I administered to the mother (who had partially recovered consciousness), a teaspoonful of tincture of camphor in water (the only stimulant at hand), and a few minutes later, 30 grains of powdered ergot in infusion. There was no further hemorrhage, and the patient, although in a state of extreme exhaustion, recovered rapidly, without a bad symptom, and within the month was able to look after the affairs of her household. The placenta proved to have been placed centrally over the internal os, and was torn through, close to the insertion of the cord.

As soon after as my patient could be safely left I called upon Dr. Wm. H. Magill for advice in this case, and learned that he had had an almost similar experience with the same patient about one year before. Mrs. L., being then in her first pregnancy, and, as she supposed, in her sixth month, was suddenly taken with a large flow of blood while standing at work; she was put to bed as soon as possible, and her physician, Dr. W. R. Gearhart, called; finding no signs of labor, the vagina was tamponed and the Doctor left to attend to other calls; returning a few hours later, he found the patient faint and weak, and, notwithstanding the presence of the tampons, the hemorrhage was again becoming dangerous. Alarmed at this condition, he sent in haste for Dr. Magill, who at once removed the tampons; finding the os sufficiently dilated, he detached the placenta at the side, ruptured the membranes with his fingers, and rapidly effected version and delivery by the feet; although no delay occurred in delivery, and but little force was required, the child showed no signs of life. A little less than one year from my first attendance I was again called in haste to Mrs. L., and found her in bed, having been taking suddenly a few minutes before, with profuse hemorrhage. She was then near the end of her sixth month of pregnancy, and, certain that I had again a placenta prævia to deal with, I had in my pocket a package containing three drachms of powdered ergot, which I handed to one of the attendants, with directions to put it in half a teacupful of boiling water, and return with it immediately. While preparing for an examination, a sudden gush of blood, which filled the bed and clothing about the patient, warned me that there was no time for delay, or the catastrophe so narrowly averted on the former occasion might be realized on this. I found complete dilatation of the soft parts, some small coagula still in the vagina, and blood flowing in a continuous stream from the partially dilated os, through which a mass of placenta presented; a partial detachment at one side, where a forming bag of waters could be felt, enabled me to rupture the membranes at once and pass my hand up into the uterus, as the waters flowed rapidly away, and the head began to come down. I found the pressure of my hand had almost completely arrested the hemorrhage. The attendant was directed to administer one-third of the infusion of ergot, and I determined to await results. At the end of fifteen minutes a second portion was given, and in about fifteen minutes more uterine contractions began, and soon the head was pressing down firmly into my hand, which I began slowly to withdraw, taking care not to relax pressure on the placenta until it was compressed firmly by the head. The labor progressed rapidly, and within an hour from my arrival a dead child was delivered. The patient was but little more exhausted than in an ordinary labor, and was able to be up on the tenth day. In December of the same year I learned from Mrs. L. that she was again pregnant, and dreaded a recurrence of her former trouble. I charged her to go to bed and send at once for a physician on the appearance of the slightest hemorrhage. Accordingly, in the latter part of January, 1853, I was called, and found her in bed, having had a slight show, with some fugitive pains about the back and abdomen. A digital examination showed no signs of labor. She believed herself then at the middle of her seventh month. I enjoined rest in

bed, cold drinks, and prescribed a few doses of acetate of lead and opium; in a few hours the hemorrhage ceased, and the next day, in spite of my injunction, she was again about the house. These attacks recurred at intervals of about a week, increasing in quantity and duration of flow with each return, for which, after the first attack, I prescribed, to be alternated with the acetate of lead and opium, five grains of powdered ergot every four hours. About the middle of March I was called in haste, and found her in bed, with regular labor pains, accompanied with free hemorrhage; the os dilated to the size of a silver dollar, through which the edge of the placenta protruded. Pressing this to one side, I ruptured the membranes; the pains increased rapidly, and soon the vertex presented. With the pressure of the head on the placenta the hemorrhage soon ceased. I felt that I could trust to the natural powers for a satisfactory result. After an easy labor of about two hours, my patient was the mother of a fine, healthy boy, now a successful business man in the State of Ohio and the father of several healthy children. The family were preparing to leave Danville, and soon after went to their new home in Ohio.

While visiting a patient a few weeks since, I was introduced to Mrs. L., a fine, matronly-looking widow lady, of about fifty years; to my great surprise I found she was my former patient, whom I had not seen or even heard of for over twenty-seven years. At this meeting all the circumstances here related were recalled and discussed. I learned that after leaving Danville she had given birth to several children, without any complication whatever, but none of whom lived to grow up. She promised to see me again and furnish me more accurate data of her case, my own records having been lost while absent from home during the war; but professional duties called me from home, and Mrs. L. left Danville without seeing me again. This, with but one exception, where the condition was but partial, is the only patient in my own practice in whom I have met with "placenta prævia," although, between my last attendance on Mrs. L., in the spring of 1853 and the fall of 1860, when I temporarily retired from practice, I attended in more than 1700 cases of labor.

—An act enforcing compulsory vaccination has been passed by the Parliament of Tasmania, and assented to by the Governor. 12,000 persons in South Australia have been vaccinated during the last two months. The registered number of successful vaccinations on children under 14 years of age, in New Zealand, during the last four years, was 48,253.

Hospital Reports.

UNIVERSITY HOSPITAL.

CLINIC OF LOUIS A DUHRING, M.D,

Professor of Dermatology.

Reported by Fred A. Taylor, M.D.

Case 1.—Erythema Multiforma.

There comes before us first a German woman, about fifty-five years old, with an eruption on her hands and arms, confined chiefly to the extensor surfaces. The disease is characterized by variously sized, ill-defined, erythematous, distinctly elevated patches, made up of split-pea sized, modified papules, tending to run together. The modifications of these papules play an important part in the picture of the disease, since they constitute it a case of erythema multiforma. It is a characteristic case of the papular variety of this disease. As the name indicates, the case exhibits a variety of lesions, which taken together, make up the definite disease. Some of the papules making up the patches are simple, distinct, and of a bright reddish hue; most of them, however, are papulo vesicles; *i. e.*, having begun as a papule and attained the size of a split pea, or larger, a vesicle has developed in the centre, which is of various size relative to the papule, and of a violaceous color, which gives a variegated appearance to the lesions that is quite characteristic of the disease. Passing your finger over the lesions you notice the marked elevation, much more distinct to the touch than to the sight. On the right arm the disease is less developed than on the left. You have observed how distinctly the disease is here confined to the backs of the forearms, hands and fingers. This is its usual seat. An eruption coming out rapidly, and confined to these regions, you may justly suspect to be erythema multiforma.

The disease is not a common one with us, but appears most frequently in the spring and autumn. As a rule, the general health is not at all or but slightly affected, and the subjective symptoms are not marked; the disease being as a rule accompanied with but little itching, though patients sometimes complain of a sense of heat or burning. It makes its appearance rapidly, and usually runs its course in from ten days to three or four weeks, disappearing of itself; it consequently is not often brought to the notice of the specialist. The disease looks more formidable than it really is. It has a tendency to relapse, however, and a person who has once had it is liable to a second attack. Both children and adults of either sex are liable to it; it is more common, however, in women between the ages of fifteen and thirty.

Treatment is, as a rule, of little avail. No internal or external remedies materially affect it. In markedly vesicular cases the fluid extract of grindelia robusta sometimes exerts an influence over the vesiculation, but there is no indication for its use in the present case. The disease will get well of itself, the lesions changing in color, some becoming yellowish and others bluish as they pass away.

Case 2.—Acne Vulgaris (pustulosa).

Our next case is that of a girl, seventeen years of age, in manifestly low condition of health, who exhibits an unusually marked case of acne of the face, back and chest. She has had the disease eight years; its first appearance being slight, she says, but being as bad as it now is for four or five years. It is characterized by large papules and pustules, covering nearly every portion of the face. You can hardly discover a single healthy square line on its surface. The pustules are suppurating freely so that the face is dotted over with yellowish points. On the back and shoulder-blades the eruption is scarcely less severe. Here you find papules in every stage of development; small and reddish in their commencement, increasing in size as they become older, some of them finally tubercular or suppurating; and scattered about among them are violaceous and muddy-colored spots showing where former papules have existed. The front of the chest over the sternum and upper ribs is quite thickly studded with similar lesions.

Inquiring into her history we learn that the girl has suffered from epilepsy in a mild form since she was three years of age. She has been under treatment for this latter disease many years, taking bromide of potassium most of the time. Now, as the continued administration of this drug often provokes an eruption of acute acne, we are led to suspect this to be the exciting cause in the present case. On further inquiry, however, we learn that the acne had been established before she began to take the bromide. Moreover, judging from the prescription she shows us, the amount she has been in the habit of taking is not sufficient to have produced the acne. It is, then, an idiopathic case of acne vulgaris, probably aggravated by the use of the bromide of potassium.

It will require six months, or longer, to effect a cure. Her low, ill-nourished condition indicates a constitutional treatment. We will prescribe a preparation of iron and quinia, to be taken three times a day. We will also give her, if she continues to take the bromide of potassium, two or three minims of Fowler's solution of arsenic, daily. This will be to correct the influence of the bromide on the acne. If she does not take the bromide, the arsenic will not be given. Locally, the diseased parts must be bathed in hot water, by means of a sponge, fifteen minutes, every night. The pustules must be opened, both before and after bathing, either with a needle or a sharp-pointed knife. After the bath, an ointment of precipitated sulphur, a drachm to the ounce of cosmoline, must be thoroughly applied. This treatment will be continued two weeks. At the end of that time the condition will be very much improved. The strength of the ointment will then be increased to two drachms of the sulphur to the ounce. After continuing with this three or four weeks longer, the ointment will be suspended, and, perhaps, the hot bath also. We will then, possibly, use the following lotion:—

℞. Zinci sulphatis,
Potassii sulphureti, āā ℥j
Alcoholis, f℥ ss
Aquæ, f℥ vss. M.

Sig.—To be dabbed on every night and allowed to dry. Shake before using.

Her bowels must be kept open, if necessary, by a saline laxative, taken before breakfast. The tonics will be employed for some time, and, perhaps, later in the treatment, arsenic internally.

Case 3.—Tinea Tonsurans.

The next patient is a little boy, about six years old, with light hair, who has a disease of the scalp, exhibiting extensive characteristic patches of tinea tonsurans. It is a case, you will remember, that was before the clinic about a month ago, and I have not seen it since. At that time the treatment advised was thorough depilation of the diseased surface, and the application of sapo viridis followed by sulphurous acid. The treatment has not, I venture to say, been properly carried out, and there is, consequently, not much improvement. The scalp over the vertex and back part of the head is devoid of healthy hair, but is studded with the short stumps of hairs which have been eaten away by the vegetable parasite which characterizes the disease. These short hairs are loaded with the fungus. Here and there is an ill-defined circular patch, where the skin is more completely denuded. The skin is dry, scurfy, and exhibits the characteristic "goose-flesh" appearance. The peculiar light yellow color of his hair is due to the bleaching effect of the sulphurous acid which has been applied.

To effect a cure in a severe case of tinea tonsurans is no simple matter. It may require from three months to a year of attentive treatment. To be properly treated it must be seen every day or every other day, and half an hour be devoted to the careful removal of hair from the diseased surface; then the local applications must be thoroughly made. Even under such care as this, the disease may resist treatment for months. The treatment of tinea tonsurans does not generally gain much credit for the physician. It is often so obstinate a disease, and it so rarely receives the constant attention it demands, that frequently it lingers indefinitely.

By proper attention, however, any such case may be cured. In the one before us the scalp is too dry for the use of a lotion, and we will, therefore, discontinue the sulphurous acid and substitute the oleate of mercury with a strength of five per cent. Later, the strength of the ointment will be increased to ten per cent., constantly guarding against salivation. Before the applications of the ointment the surface will be thoroughly washed and depilated. We will see that our patient appears before us oftener.

Case 4.—Excoriated Papular Eczema.

A woman, forty-five or fifty years of age, hard-working and spare, presents herself with a disease on the front of the leg extending from the ankle to the knee. It constitutes one large ovalish patch, irregular in outline, covering the entire front of the leg and showing an erythematous surface scattered over with numerous distinct excoriated papules. It is a case of excoriated papular eczema. The whole surface has been severely scratched, and the excoriations are very marked. The disease evidently causes her great suffering. The itching, she says, is in-

tolerable, and prevents her sleeping. She has had the disease three years, but of late it has been spreading. It has an acute appearance, the lesions being bright red, and evidently recent.

It is a case where strong remedies are needed. There are two or three lotions that may be used. Carbolic acid and thymol both act happily in such cases. The alkaline tar lotion also might be used, according to the following formula:—

℞. Picis liquidæ, ℥ ij
Potassæ, ℥ j
Aquæ, f℥ v. M.

Sig.—Dilute a teaspoonful into two or four ounces of water, and use freely as a lotion.

In this case, however, we will first employ the carbolic acid, prepared as follows:—

℞. Acidi carbolici, f℥ ij
Glycerinæ, f℥ ss
Alcoholis, f℥ ij
Aquæ, ad Oj. M.

This will be applied freely, three times a day, for ten minutes at a time. The application may cause smarting, but its use should be persisted in for three or four days. At the end of this time the more acute symptoms will have subsided, and we will substitute the lotion by an ointment of white precipitate or calomel, thirty grains to the ounce of cosmoline and oxide of zinc ointment. The use of the lotion may, perhaps, be repeated from time to time. It will, probably, require several months to effect a complete cure.

Case 5.—Chancroid.

The next case is that of a negro about twenty-five years old, who has, he says, a skin disease on the penis. There is an ulcer of the size of a large split pea, occupying the inner surface of the prepuce and its reflection on to the glans penis. There are also two or three small superficial ones, and a marked excoriation on the glans itself. The large ulcer has an elevated border, and no induration. It made its appearance as a small lesion, four or five days ago, which, he states, was about six days after intercourse. This is plainly a chancroid. You will find it stated that chancroids may appear five, seven, or more days, after infection. In my experience the sores usually make their appearance much earlier than this. I recall an exceptional case, seen recently in a physician, where an excoriation the size of a small split pea was developed within twelve hours after the infecting intercourse.

The treatment in this case will consist in his maintaining absolute cleanliness, by washing the parts three or four times a day, and then dusting with a small amount of iodoform powder. If the odor of the powder is too offensive, it may be made into an ointment with balsam of Peru and vaseline:—

℞. Iodoformi,
Balsami peruvianæ, āā gr. xv
Unguenti petrolei, gr. xxx. M.

Sig.—To be applied two or three times daily.

The ulcer will probably soon heal under this treatment.

Case 6.—Purpura Simplex.

This man, about forty-five years of age, comes before us to show the result of the treatment we prescribed a week or two ago, for purpura simplex of the thigh and legs. You will remember that when he was before us last, the thighs and legs were everywhere thickly mottled with small hemorrhagic spots of a reddish and purplish hue. To-day he is much better. The lesions have faded to a light brownish-red color, and in some places have almost entirely disappeared. His treatment was a drachm of the fluid extract of ergot, three times a day. The remedy will be continued.

Editorial Department.

Periscope.

Quebracho.

In *El Genio Médico-Quirurgico*, Madrid, January 7th, 1882, Dr. Fr. Simon, of Nieto, publishes an interesting report on the above substance, from which we extract as follows:—

Quebracho is the bark of a tree (*aspidosperma quebracho blanco*) which grows in South America; in color it resembles calisaya bark, and has a hot, bitter, and intensely disagreeable, acrid taste. Penzoldt first noticed its medicinal value; others, among whom Berthold, Krauth, Schütz, and Laquer, have also experimented with it. All the observations thus recorded agree with those made by Dr. Simon, and point to quebracho as a specific in dyspnœa, whether resulting from asthma, or chronic or acute affections of the respiratory or circulatory systems, or when due to emphysema and pulmonary catarrh.

Two methods of preparing quebracho have been recommended by Penzoldt: the one, a tincture (1 to 10), of which the dose is from forty-five minims to one drachm, daily; the other, an aqueous extract, which is obtained in the following way: 150 grains of pulverized quebracho are digested in three ounces of alcohol; they are then evaporated and dissolved in water; the solution is filtered and evaporated to dryness. This forms the dry extract, of which the dose is from 15 to 30 grains, daily; or it is dissolved in twenty times its weight of boiling water, and then constitutes the liquid extract, which Penzoldt prefers to any other form, not excluding *aspidospermine* (an alkaloid obtained by Frande); two to four teaspoonfuls of the liquid extract may be given daily.

Dr. Simon details six different cases in which he administered quebracho successfully, besides some interesting experiments made upon himself, and he recommends the two following formulæ :—

℞. Tincture of quebracho (1 to 10), ℥j
Water, f℥iiss
Syrup, f℥ss. M.
Sig.—A tablespoonful every four hours.

℞. Dry extract of quebracho, gr. xxx
Water, f℥iss
Syrup, f℥j. M.
Sig.—A teaspoonful every half hour, until relief is obtained.

He concludes his report with the following observations :—

1. Quebracho is a substance possessing the property of moderating respiratory movements ; it acts, in truth, as the digitalis of the lungs.

2. It relieves dyspnœa, whether resulting from purely nervous disorders, or when due to anatomical alterations in the respiratory or circulatory apparatus.

3. Its action is immediate and its effects safe, at least, so far as observed.

4. Its effects on dyspnœa caused by circulatory troubles warrant the belief that it not only acts directly on the nervous system governing the respiratory movements, but that its influence extends over cardiac innervation.

5. Finally, it is believed that quebracho facilitates expectoration.

Addison's Disease.

From the London *Medical Times and Gazette* we learn that an interesting contribution to the pathology of Addison's disease was brought by Dr. Goodhart before the last meeting of the Pathological Society, and gave rise to a still more interesting discussion. The cases briefly consisted in atrophy or complete disappearance of the supra-renal capsules, associated with all the clinical features of Addison's disease in a marked degree. It would appear, therefore, that the changes in the capsules which Addison and all subsequent writers have considered essential to the disease may, after all, be only one of several conditions capable of giving rise to this group of symptoms. Many facts were brought forward in support of this opinion. Dr. Goodhart himself was of opinion that such cases as these strongly suggested the view that changes in the abdominal sympathetic were the real source of the symptoms—a view which was traversed by Dr. Pye-Smith, who, after pointing out that the adrenals were obsolete organs in adult life, the removal or destruction of which in animals produced no effect, warned his hearers against the acceptance of this neurotic theory, on the ground of its extremely simple and seductive nature. He supplemented this by pointing out that pigmentation of the skin was very common, and that there was neither pathological nor physiological analogy in support of melasma being due to nerve changes. Dr. Coupland was hardly prepared to accept Dr. Pye-Smith's views, and pointed out the striking analogy presented by the vomiting and pigmentation of pregnancy in support of disorder or implication of the abdominal sympathetic. He did not think that structural changes need necessarily be found in the nerve ganglia themselves, although he had met with one notable example, where fibrosis with atrophy of cells existed. He expressed his belief that the changes in the supra-renal capsules were of the nature of a localized tuberculosis, which might take place without any symptoms of Addison's disease. Dr. C. Creighton, in regard to the function of these bodies, referred to the researches which had shown that the blood issuing from the capsules gave chemical reactions different from those which were obtained from blood entering them, and argued that changes, such as atrophy, or caseation, which practically cut off the blood supply, might lead to such alteration in the blood as would bring on pigmentation, while cancerous changes, which increased the circulation through the organs, would have no such effect. Finally, Dr. Fowler referred to a case of lymphadenoma, in which the abdominal sympathetic was largely invaded, where the capsules were healthy, and in which all the symptoms of Addison's disease were present.

Fibrous Tumor of the Uterine Neck.

Paris *Médical*, January 21st, 1882, reports, that at a sitting of the "Académie de Médecine," M. Depaul exhibited a tumor which he had removed from a woman arrived at nearly her full term in pregnancy, and which not only rendered delivery impossible, but would have caused the death of both mother and child.

The patient, a woman 32 years old, was in her fourth pregnancy, the three others having terminated normally. Her general and local health were unimpaired. A few days prior to her admission into the lying-in hospital she felt something protruding from the lips of the vulva, and, according to her report, a midwife and a physician both declared it to be part of the placenta which had become detached. On examination, M. Depaul discovered protruding from the vulva a purple-red tumor, as large as the extremity of the hand. Its texture was firm, although supple and elastic, and it emitted a most fetid smell, due to contact with air and want of cleanliness, as there existed no trace of gangrene. The tumor so filled the vagina as to prevent the finger from reaching the orifice of the uterine neck. M. Depaul ordered a full bath and postponed further examination. The next day he found the patient in labor. The projecting portions of the tumor had increased to the size of two fists, and it pressed against the vulva in such a way that a finger even could not be introduced into the vagina. The waters had drained off, and the child was suffering ; this was evident from the reduced heart beats. Immediate action was necessary. M. Depaul gradually drew the enormous mass from the vagina, and by careful examination made sure that its point of adherence was on the left side of the anterior lip of the neck. In drawing out the tumor part of this anterior lip had followed, and it became clearly visible that this was the seat of the fibrous mass. With the aid of a bistoury, M. Depaul severed

the pedicle of the tumor, and found that it measured between five and six centimeters. As is the case with fibrous uterine bodies, no hemorrhage followed.

This tumor was remarkable on account of its weight, which was fifty-six ounces, it being the largest that has thus far been observed.

After removing the tumor the child was delivered by means of a blunt hook applied on the hip fold, it being a breech presentation. The child was still alive, and both it and the mother are now in perfect health.

A histological examination of the tumor showed that it was composed of elements from the connective and smooth fibrous tissues. There were besides cavities containing sanguineous collections.

A New and Reliable Operation for the Cure of Webbed Fingers.

Arthur T. Norton, F.R.C.S., contributes the following to the *British Medical Journal*:—

C. K. was sent to me by Mr. Moore, of Chiswick. The boy, one of four children, was about four years of age, and had the three inner fingers of the left hand webbed together. No relative had suffered from the same deformity. The operation which I performed can be best explained, and, indeed, can only be understood, by referring to the diagram.

A tongue of integument was cut from between the knuckles, and another corresponding in shape, and position, and size, on the palmar surface. These tongues were then raised by dissection, and the webs cut through. The knife was then carried back so as to sever all the tissues as far back as the bases of the tongues, and a little superabundant tissue was removed. Next, the apices of the tongues were sewn together, and lint, dipped in cold water, applied. The flaps or tongues united by the first intention between the little and ring fingers, but one of the pair between the ring and middle fingers sloughed at its apex from its suture. The cause of the sloughing was incomplete section of the tissue between the fingers up to the base of the tongues, the result of which was too great tension, and consequently giving way, at the suture. However, even in this case, the tongues separated only a very short distance, and the interspace rapidly healed, so that there was no redevelopment of the web.

A drawing of the hand was taken after the operation, by which it will be seen that, in the case of the middle and third finger, a little more tissue might have been removed with advantage after the raising of the tongues, in order to bring the line of the natural web into proper position. The healing of the fingers progressed rapidly in the middle finger and on the outer side of the ring finger. Between the ring and little fingers the healing was not so rapid, because the web between these fingers was thick and narrow, so that, after its section, a larger surface was denuded.

The points to be considered in performing the operation are these: 1. The tongues should be cut thick, so that their vascular supply may be complete, and the chance of their sloughing reduced to a minimum. 2. They should be cut rather narrow, with judgment; otherwise, they are compressed laterally and bulge upward at the margins, instead of lying in adaptation to adjacent tissues. Such compression, of course, interferes with their circulation. 3. The tissue between the knuckles is to be cut back, or, if necessary, cut away, so that the apices of the tongues shall lie well in contact with each other without tension. 4. The tongues must be of sufficient length, so that there shall be no tension when the suture is applied; they had better be too long than too short. 5. The apices of the tongues are very small, so that a very small needle should be used to carry the suture. 6. In shaping the tongues the line of the natural web should be carefully observed. If the tongues

heal by first intention, no web can redevelop. There is no reason whatever why union by the first intention should not invariably take place if the above points are remembered while performing the operation, and thus one of the most troublesome and unsuccessful of operations is converted into one of the most simple and most certain of success.

Splenotomy Not a Justifiable Operation in Leucocythæmia?

Herbert Collier, M.R.C.S., contributes a lengthy paper on this subject to the London *Lancet*. From it we note that twenty years ago extirpation of the spleen for disease of that organ was

looked upon rather as a surgical experiment than a recognized operation; and of the four cases which had up to that time been put upon record, the first two were discredited by the majority of writers, and the other two, which had both proved fatal, were regarded as conclusive evidence of the hopelessness of the operation. The first case of splenotomy in England was performed by Mr. Spencer Wells, in 1865, for simple hypertrophy, and the result was sufficiently encouraging to inspire not a few surgeons with the hope that at no distant date removal of the spleen would become as recognized and valuable an operation as ovariotomy was at that time. Mr. Spencer Wells' example was followed by Mr. Bryant, in 1866, and again in 1867, and both patients sank almost immediately after the operation. An exhaustive statistical table of twenty-nine operations furnishes the following results. It was performed sixteen times for leucocythæmia and thirteen times for various other morbid conditions of the spleen. It appears that out of the thirteen cases in which leucocythæmia was absent, no less than eight recoveries are recorded, while out of the sixteen in which the latter disease was present, there is no instance in which the patient recovered even from the primary effects of the operation. Now, it must strike the most casual observer that the fatality in these latter cases is due to something outside the mere effects of the operation, which, in itself, appears to be less dangerous than one might reasonably be led to expect. And surely, few will deny, although many appear to forget, that this "something" is actually present in these cases, and readily explains the cause of surgeons losing at the rate of a hundred per cent. after splenotomy in leucocythæmia.

Dr. Gowers, writing in "Reynolds' System of Medicine," says:—

In leucocythæmia the tendency to hemorrhage is unquestionably greater than in most cases of simple splenic anæmia, and this constitutes a danger so great as to render the operation (splenotomy) scarcely justifiable in the advanced stages of the disease. Naturally, a risk of immediate death so great as is and must be involved in the operation is only consented to when the disease is advanced, and the œdema and dyspnœa in themselves indicative of the greatest source of risk—the profound blood change. We are yet, moreover, without any evidence as to whether the removal of the spleen would be attended with an improvement in the deficiency of the red globules, which constitutes the greatest source of danger.

Professor Mosler, writing on excision of the spleen as a remedy in leucocythæmia, thus concludes his remarks: "These facts lead us to the conclusion that neither in the early nor in the late stages of leucocythæmia is splenotomy justifiable; and, indeed, that operations even of the most trifling character are to be as far as possible avoided."

Summing up the lessons taught by his two cases, Mr. Bryant, writes: "We have thus learned two things from the cases related. First, that the enlargement of the spleen in leucocythæmia appears to be only a part of a general disease affecting the glandular system as a whole; and, second, that in splenotomy for such a disease there is a predisposition to hemorrhage with which surgery is incompetent to deal. It can neither be foreseen by any amount of care, nor coped with by any amount of skill. Under these circumstances there is no shirking the conclusion that the operation is physiologically unsound and surgically unsafe, and for leucocythæmia, should not be performed." To these remarks, coming as they do from one who has fully realized upon how slight a fabric the theory of splenotomy as a remedy for leucocythæmia is built, it will surely be unnecessary to add more. And, in conclusion, let me trust that the recorded facts, together with the condemnation of the operation by the high authorities I have quoted, will suffice to prevent the further repetition of this useless and deadly experiment.

Two Cases of Paroxysmal Hæmoglobinuria.

Dr. Robert Saundby reports the following instructive cases in the *Medical Times and Gazette:*

In the *Medical Times and Gazette*, for May 1, 1880, I described a remarkable and unique case of hemoglobinuria in a youth of sixteen, who presented the following peculiarities: He was of a peculiar yellow, anæmic complexion, the yellowness being more marked during his attacks; he had an enormous spleen, reaching down to the umbilicus; his blood presented the characters of slight anæmia; his urine *always* contained more or less hæmoglobin. I mentioned that it was hereditary, his father having had a similar enlarged spleen, and passed water of the same character; and that a sister was also a victim to this peculiar affection.

Recently I was called to see the sister for a trifling indisposition, when I ascertained the following facts: She presents no abnormal physical signs, especially no evidence of splenic enlargement; her complexion is slightly ochre-tinged, like the brother's; her urine always contains a trace of hæmoglobin without albumen. She is now sixteen, and had menstruated for a short time regularly, but this has stopped for the last six months. She appears in other respects a well grown, well developed, intelligent young girl.

The brother has exhibited symptoms of mental aberration which gave rise to so much difficulty that I certified him as insane, and he was for a short time in an asylum. He seems quite unable to settle to any occupation: his mind is full of the most extravagant schemes; he appears unable to realize his position in life, and systematically ignores the state of his health. He has several times run away from home, at one time getting as far as Belgium. There is no history of insanity in the family, but during the latter part of his father's illness he was very peculiar; he was at times violent to his wife, and he distressed her very much by confessing to her that he had been unfaithful—a statement which she took pains to investigate, and she assured me that she believed it was entirely unfounded.

At the end of 1880 I had a young gentleman sent to me by my friend, Mr. G. W. Tait, of Knowle, as a case of chronic Bright's disease. He had had persistent albuminuria since Janu-

ary, 1878, and had been seen by several physicians—among others by Dr. George Johnson—by all of whom he was regarded as a case of Bright's disease. He had spent the previous winter in Italy. His own account of himself was that he had had several attacks of hæmaturia without any dropsy; the first came on with a sore throat. On examining his urine it was clear, specific gravity 1.008, and contained a dense cloud of albumen, but no casts. There was no cardiac hypertrophy, nor evidence of polyuria; the pulse was hard. His general appearance was that of a fairly healthy, well-developed young man, and the constant absence of casts in the urine induced me to give a guarded but favorable opinion of his case. The idea of hæmoglobinuria was present to my mind, but had little to support it at that time. I saw him from time to time during that winter, but lost sight of him till last October, when I was sent for to see him at a country house where he was staying, and found him in bed, perspiring freely, in no pain; pulse 108; temperature 104.2° Fahr.; tongue furred; bowels confined; fauces slightly injected; no sickness or headache; no œdema; physical signs in thorax and abdomen negative. He told me that he had had a cold for a fortnight, and had felt "shivery" for the last few days, but had had no definite rigor. His urine was black, and contained hæmoglobin, albumen, granular matter, and hyaline casts. On the following day his temperature at the same hour (4.30 P.M.) was 105.2°, and the urine just passed showed, under the microscope, granular matter, hyaline and granular casts, and pigment, but no blood-corpuscles or oxalates. He was ill altogether about three weeks, but the urine began to get slowly lighter after four or five days. I tried him with chloride of ammonium for a day or two, but he disliked it, and it produced no effect, so I substituted two grains of quinine, three times a day, dissolved in hydrochloric acid, which, together with an occasional dose of Carlsbad salts, he took until he was convalescent.

This case is of interest on account of the persistence of albumen in the urine, a symptom which has been recorded in another case by Dr. Forest. He has had no relapse since, but I have strongly urged the desirability of his seeking some occupation in a warm climate.

Accidents from Pilocarpine in Croup.

In Paris *Médical*, No. 50, Dr. Bouchut thus observes: After reporting cases of croup in which favorable results have been obtained from pilocarpine injections, it is but fair to speak of the cases wherein those injections have produced serious accidents. Quite recently I have had an opportunity of experimenting with this substance on a great many children in the Hospital des Enfants Malades, and I have obtained no beneficial results worth mentioning. The bulk of my observations confirm what has already been said by Weiss, Neumeister, Kuster and many others. The only effects I have been able to discover are prostration and collapse, although I never gave one-third to two thirds of a grain daily, as recommended by Guttmann.

During my absence from the hospital two children were treated, and while so weak a dose as one-sixth of a grain was used, yet the most serious toxic effects were produced. A summary of these two cases will best illustrate the results attending this medication.

Case 1.—Girl, 6 years old; well characterized membranous croup. Treatment: Papaine, chlorate of potash, and ten drops perchloride of iron. After a few days of this treatment slight improvement. The same treatment was then continued, and in addition, a subcutaneous injection of pilocarpine was given. Profuse perspiration; no salivation. The following day another injection was given. Salivation now became abundant; perspiration very copious. The patient was seized with a violent chill; cyanosis of the face. The upper part of the body became cold, lower extremities moist. One or two attacks of vomiting. Two injections were given the next day and attended with similar results. The following day but one injection was given. Same symptoms. The throat appeared somewhat better, but the general condition was bad. Paleness of face, and great prostration. The daily injections were now discontinued. Vomiting and chills ceased; but the larynx became embarrassed; the cough grew croupy; the voice weakened, and asphyxia followed; owing to general depression, no operation was performed, and the patient died.

Case 2.—Female child, 2½ years old. Same general symptoms, and same treatment. The pilocarpine injections produced no vomiting, but were otherwise attended with similar results as in the first case, and the child died after a few days.

A Halfpenny Swallowed by a Child and Vomited Five Weeks Afterwards.

Dr. R. T. Jenkins reports the following case in the *Medical Times and Gazette*:—

A little boy, five years old, was playing with one of his relations. He seized a shawl which was on the sofa, put it to his mouth, and bit it. At the same moment he was attacked with a fit of spasmodic coughing, and a bronze halfpenny, which was observed to be upon the shawl, was suddenly drawn into his mouth, carried backward during a forced inspiration, and sucked down, unintentionally. A physician was called in at once, and made an unsuccessful attempt to extract the coin with forceps. The third day the child complained of pain at the pit of his stomach. Vomiting after taking food and after the paroxysms of coughing became more frequent. The child lost flesh and became much weakened. He could only retain a very small portion of food at a time.

One morning, five weeks afterward, the child vomited. In the matter vomited the mother observed a solid substance, dark in color, and thickly coated. She put it into water, and after much washing she found it to be the missing halfpenny. It was much corroded, but the distinctive features of the coin were visible on both sides.

The child has not suffered any further inconvenience.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	**$5.00**
Half-Yearly Compendium of Med. Science,	**2.50**
Reporter and Compendium, - - -	**7.00**
Physician's Daily Pocket Record, - -	**1.50**
Reporter and Pocket Record, - - -	**6.25**
Reporter, Comp. and Pocket Record, - -	**8.25**

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

A NEW DEPARTURE IN MEDICAL ETHICS.

The recent action of the New York State Medical Society is worthy of more than a passing notice, since being, as it was, the deliberate act of the representative body of our profession, of the greatest State in the Union, its action, we are forced to conclude, will carry much weight, and will be very potent for good or evil, as the wisdom or error of its judgment may predominate. It was the first time in the history of medicine that a formal and powerful assault has been made upon the barrier that separates the old from the new school. It was claimed by some of the more ardent advocates of professional ethical liberality, that the code of ethics ought to be abolished entirely, and the broad rule be substituted in its place, that every physician should be required merely to "*act as a gentleman.*" This seems like going back to first principles, for upon this basis professional and civil law really has been erected. The golden rule of "*Do unto others as you would that they should do unto you,*" means nothing more than that you should at all times be "*a perfect gentleman.*"

But different men view the same question from different standpoints, and thus arrive at widely divergent conclusions. Hence has it been necessary to become more explicit, and reasoning up from the basis of the golden rule (common to all civilization), to enunciate certain definite rules for the guidance of men; to say you can do this, and you cannot do that. Since the origin of homœopathy, until the present day, a wide and impassable chasm has separated it from our school. Why? Because, as we had occasion to say in a recent issue, the two systems of treatment are antagonistic, they are irreconcilable, and one must be wrong while the other is right. There can be no half way business about it; homœopathy must be potent, or it must be valueless.

If, then, a man believes that the true system of combating disease is to found in the regular practice, how can he possibly tolerate homœopathy.

If he believes that it requires four or five grains of a certain drug to produce its therapeutic effect, how can he, without stultifying his avowed belief, admit that a small fraction of a grain of this same drug can produce equally beneficial results.

If he cannot give his honest adherence to this law of infinitesimals, how can he conscientiously openly countenance homœopathy, by consenting to consult with those who believe in and practice its teachings.

If, believing that it is wrong, that its agencies are incapable of curing diseased conditions, he still countenances and encourages it, so as to cause those who look to him for counsel and advice to rely upon its remedies and to place confidence in its practitioners, then does he indeed, as we have already said, become guilty of "*compounding a social felony.*" Because, by his action, he causes his followers to believe in that which he does not himself have any faith in.

To illustrate, familiarly: the physician who would refuse to have his wife, his children or himself treated homœopathically, would express by his refusal, louder than any words could do,

his disbelief in the efficacy of the homœopathic materia medica. If, now, such a gentleman should consent to consult with a homœopath, he would be doing wrong morally, since he would, for some motive or other, be doing for others what he would consider to be wrong for himself and his own.

There are, of course, two sides to this much-discussed question. There are some homœopaths who are so only in name. To further their own temporal interests, they make an open profession of this belief, while in truth they view disease from our vantage ground and combat it with our forces.

Now, when asked to consult with such a man, by consenting no crime is perpetrated against society, since by meeting him and deciding upon a course of treatment that you are sure beforehand will coincide with your conscientious views, you are not knowingly and willfully doing an injury to your fellow-man.

This seems to be the ground upon which the New York Society based its action, since the statement was made that homœopaths are to-day practically regular physicians in all but the name. This, however, is too broad a view, since there are at the present time many *Simon pure* followers of Hahnemann, with whom we can have no professional intercourse without prostituting our sense of right.

Again, even when we consent to consult with what we might call liberal homœopaths, we are not strictly acting the part of the "*perfect gentleman*," since the little monitor (*conscience*) within us constantly reminds us that we are countenancing deceit.

There must, then, be a right and a wrong. If the abstract principles of homœopathy are correct, then the fundamental doctrines of our practice must be based on false premises, and vice versa. If, as was stated at the meeting referred to, the disciples of Hahnemann do not now adhere to his teachings, but give their allegiance to our doctrines, then ought they to come out openly and manfully and embrace our faith. If they do not; if they still conscientiously adhere to the aborted but well meant reasonings of their apostle; if they still believe that the most minute doses and the most infinite attenuations are potent and requisite to cure disease, then must we, in the confident strength of our own faith, say they are wrong; that they are no doubt honest in their belief, but that their doctrines and dogmas are fallacious and impotent; and thus saying and believing, we cannot, in justice to ourselves and our fellow-men, openly countenance their practice.

We do not believe in violent denunciation of any honestly believing man; but we do maintain that there must of necessity be a right and a wrong to every question. If one man says, "You give too much medicine in every case; your doses are too large, and you reason from fallacious grounds," while his opponent answers, "Your doses are ridiculously small and cannot have any appreciable effect," one or the other must be wrong. It would be equally "*compounding a social felony*" for the conscientious homœopath to consult with the strictly scientific physician, as it would be to reverse the case.

Such legislation as the New York State Medical Society has seen fit to pass can remove the penalty from this wrong-doing; it can give the sanction of professional law to this social wrong; but it cannot remove nor disguise the self-evident fact, that when the conscientious believer in our principles and doctrines consents to meet at the bedside one whose belief and whose prospective methods of treatment he honestly considers to be useless or worse than useless, he is doing a social and moral wrong, he is sacrificing his conscience, and in doing so, is fully under the impression that he is doing his patient an irreparable injury. This action on the part of an influential society has opened the ethical door, through which many easy-going consciences can pass; but let us hope that the better portion of the profession will, as they always hitherto have, regard it honestly impossible to professionally meet those whose methods of curing disease they consider fallacious and invaluable. Liberality of belief, and tolerance of those who may differ from us in anything, is commendable, but conscience must never be sacrificed.

COMMISSIONS TO EXAMINE ADULTERATED FOODS AND ARTICLES OF COMMERCE.

Some articles that appear in this issue will direct the attention of thoughtful physicians toward the dangers to health that exist unsuspected in articles of diet, as well as in many different objects offered for sale. It seems strange to talk about disease of the liver in an oyster, yet you will note that such an authoritative source as the Chief Medical Officer of Health, of Dublin, has found such a condition to exist, and points out a green color of the oyster as diagnostic of the disease. Probably but few of our readers have ever seen this condition, but within a few days we encountered such an oyster, in a stew, and wondered at it, until we saw the article referred to. The oyster we noted was distinctly green, of a bright color all down one side.

It is well known that various articles of food are frequently adulterated, but attention has not been sufficiently directed to this channel. The physician who desires to produce the greatest amount of good and to cure the largest number of patients will do well to inquire into the articles of food that have been used by patients to whom he is summoned, and whom he finds suffering with vomiting, diarrhœa, or other symptoms of *acute indigestion.*

If due, as they are in the majority of cases, to the ingestion of some poisoned food, you must remove the offensive articles from the system. Anodyne and sedative remedies will do no good, since the foreign and poisonous elements, still remaining, will keep up the irritation of the stomach or bowels, while an emetic or a dose of castor oil will discharge the cause and allow the *vis medicatrix naturæ* to cure the sufferer.

Too little attention is paid to the influence of poisoned food in production of disease, and physicians are too much prone to peer too deeply into the etiology of many common disorders, when by the exercise of a little common sense the cause would be found to be staring them in the face.

Again, children's toys are often the cause of acute enteritis or gastritis, since they are generally coated with poisonous paints, which are licked off and swallowed, innocently and thoughtlessly. These few words are given merely to direct the attention into this channel, and to cause physicians to realize that many cases of acute departure from health are due to this cause. The question we consider of so much importance that we will in a future issue furnish a special report on the subject.

But the great question comes in, "How can we prevent such adulterations, and the use of such poisoned food?" In one way only, namely, by legislation, by the appointment of committees whose duty it shall be to examine into the quality of all articles offered for sale, and to decide whether or not they are in any way inimical to health. We desire to turn your thoughts in this direction, and to prepare you for our report.

Notes and Comments.

Nasal Calculi.

Dr. Rumbold made some remarks to the St. Louis Medical Society (St. Louis *Medical and Surgical Journal*) on this odd subject. The calculi are due to the formation of cretaceous masses. The samples he presented to the Society weighed four ounces; they were removed on different occasions, from a syphilitic patient, in whom the septum of the nose was destroyed, and the inferior turbinated bone partially gone, so that they could be grasped quite readily with an instrument. Their growth was very rapid.

Renal Lithotomy.

In the *Medical Times and Gazette*, Mr. Henry C. Butlin reports an interesting case of renal lithotomy. The patient had for several years suffered from severe attacks of neuralgia of the testis. After he was admitted into the hospital, the pain was discovered to be seated in the right side of the abdomen as well as in the testicle, and that the symptoms were rather those of renal colic than that of neuralgia of the testis. The urine contained crystals of calcium oxalate, occasionally a trace of albumen, but no blood or pus. The general health was fairly good. As treatment did not afford permanent relief, Mr. Butlin cut down on the kidney, through a vertical incision in the lumbar region. The kidney appeared to be healthy, but a calculus was discovered and removed from the renal pelvis. It was composed of calcium oxalate, was about as large as a filbert

and quite prickly on the surface. The patient made a good recovery, so that in two months he was discharged, entirely free from pain, and entirely well, except that a little pus was present in the urine. The wound was treated, as far as possible, like an ordinary lithotomy wound. The absence of blood in the urine, in this case, is especially remarkable, when the situation and nature of the stone is considered.

Xanthopsis.

At a recent meeting of the Clinical Society of London (*Lancet*) Mr. W. H. Kesteven read the following notes of a case of xanthopsis. On an exceptionally hot day, last July, a married woman, aged twenty-three, having exposed herself to the full heat of the sun, was seized with acute pain in the occiput, and found that she saw all things red and green. As the pain passed off, in the course of a day or two, this intense coloration diminished. The ophthalmoscope revealed the existence of a large patch of double contoured nerve fibres at the upper part of the disk of the right eye. This, when first seen, was very prominent, and gave evidence of the existence therein of some neuritis. The left disk was normal. The color vision of the left eye was normal, but with the right eye she saw all things yellow. This condition continued for more than three months, and then gradually passed away. The author suggested that the condition might be explained by the violent impression made by the rays of the sun impinging directly on the retina. The case was examined by two other gentlemen, who confirmed the ophthalmoscopic appearances described.

Poisoning by Chromate of Lead in Weavers.

Dr. Robt. C. Smith contributes the following cases to the *British Medical Journal*. Mrs. B., aged 30, a weaver in a cotton mill, has been unable to work for six weeks; suffering from great weakness, wandering pains in her limbs, and anæmia. Her gums show well marked signs of lead poisoning. No albumen in urine. She attributes her illness to the inhalation of a yellow dust that was given up from the yarns in the process of weaving an orange-colored cloth. She had always enjoyed good health before being employed on this class of goods, and stated that her fellow workers, when engaged on this kind of work, sooner or later sickened. Mary C., a weaver in the same mill, was seen a few days subsequently. The blue line was very distinct. Her breath was offensive, while the skin and conjunctivæ were of a distinctly yellow color. There was obstinate sickness and purging of dark, sap-green motions (probably stained with chromium oxide). Urine contained albumen and a trace of chromium, but no bile nor lead. This girl's sister presented the same line of symptoms. Some seventy similar cases were observed from the same mill. In one fatal case distinct traces of lead were found in the liver. Public opinion being aroused, pressure was brought to bear on the employers, who have since then caused the yarn to be more carefully dyed and prepared before being woven. The winders and weavers wear a muslin respirator over the mouth and nose when at work; and use hooks to thread the shuttle, instead of sucking the weft through its eye with the mouth. By these precautions, rigorously carried out, the operatives, though still weaving chromes, no longer suffer from lead poisoning.

In these cases, the yellowness of the skin was the first symptom to disappear, and the blue gums the last. He concludes that, after absorption, the dichromate undergoes decomposition within the blood; the lead being fixed in the tissue, while the chromic acid combines most probably with soda—a compound which is intensely yellow, and stains the liquor sanguinis and skin for a time; and finally leaves the body by the liver and kidneys.

Puncture and Aspiration in Intestinal Invagination.

We read in Paris *Médical*, January 28th, 1882, that Dr. Godfrey has treated a case of intestinal invagination as follows: The patient, a man 37 years old, was vomiting a greenish-yellow liquid having a most offensive fecal odor. His abdomen was distended, and very tender to the touch; and distinct fluctuation together with dullness were perceptible over the entire course of the colon. The umbilical region was somewhat tympanitic. Great tenesmus existed, and the efforts at defecation only resulted in the passage of a little bloody mucus. Having carefully ascertained that no hernia existed, the intestine was punctured, first in the left, then again in the right iliac region, the largest needle of a Codman and Shurtleff aspirator being used for that purpose. More than a pint of liquid, similar to that vomited, was thus withdrawn, and the patient felt somewhat relieved. Vomiting now became less frequent, and finally ceased. Morphine, first hypodermically, then by the mouth, procured sleep, and after three days the intestine had resumed its functions, and in less than a week the patient was again well.

Subcutaneous Injections of Iodoform in Syphilis.

The *Centralblatt für die Med. Wissensch.*, No. 44, reports that Dr. Thomann, having observed the good results attending the external use of iodoform in the treatment of certain syphilitic manifestations, was led to try if similar benefits could not be derived from it in the form of subcutaneous injections. He made use of a solution containing ʒ iss of iodoform to fʒ v of glycerine, and commenced with doses of grs. ivss; finding that these were well tolerated, he gradually increased them to grs. xj. He selects, in preference, recent cases in which sclerosis has not as yet caused irreparable disorders in any of the organs, especially in the lymphatic ganglions.

After ten or twelve injections, made on different parts of the body, he has observed a marked retrocession in the symptoms. No abscesses were formed, and only among a few patients were the injections followed by a slight sensation of pain, which, however, soon disappeared. The solutions used should always be freshly prepared.

Dementia and Idiocy.

M. Magnan, of the St. Anne Asylum, recently made a communication to the Soc. de Biologie, regarding a patient who had passed from a state of dementia to that of complete idiocy. He considers that in dementia the cortical lesions of the brain are not extensive, but that as they tend gradually to become complete, the patient, as the cerebral atrophy progresses, becomes more and more idiotic. Idiots are entirely oblivious to external impressions; they can neither observe, taste, nor hear; at least, external sounds have no influence over them; patients in a state of dementia, on the contrary, preserve in their state of intellectual feebleness some faculties almost intact. The patient presented by M. Magnan was at first in a state of dementia, but gradually lost the few words she remembered, and the peculiar swaying of the body from side to side, the indecisive, vague, frightened look observed in idiocy soon appeared. The results of the autopsy proved interesting; the right cerebral hemisphere was almost intact, but the left presented adherent meningitis, with considerable atrophy and diffused sclerosis about the vessels of all the convolutions, with the exception of the frontal and ascending parietal. As the patient was not hemiplegic, this was another proof in favor of the present localization of the motor centres. This observation would seem, also, to warrant another conclusion, viz., that the right hemisphere has but a feeble part in the intellectual value of the individual.

Scrofula and Tuberculosis.

The *Medical Times and Gazette* says that M. Grancher recently made to the Société Médicale des Hôpitaux of Paris an interesting communication on the above subject. The following are his general conclusions: 1. Tubercle is a fibro-caseous neoplasm, the development of which takes place in successive stages, during a longer or shorter period; this complete evolution may be accomplished in a few months, or it may last throughout the whole of life. It may, however, be arrested during the earlier stages, and never get beyond them. 2. Pathological anatomy and experimental pathology are to-day agreed to include under the term tuberculosis the greater number of affections called scrofulous, as *local* tuberculoses. 3. Lupus, and superficial inflammations of the skin and mucous membranes, the last resort of those who persist in regarding scrofula and tuberculosis as distinct, will probably be included in the same order in due process of time. 4. The necessities of practical medicine, which, after all, must first be reckoned with, do not permit all tubercular affections to be confounded together; on this account it is convenient to retain the word "*scrofula*" for those tubercular affections which are very slight and generally curable.

Severe Illness Caused by Ingestion of Cakes and Cheese.

The Dublin *Journal of Medical Science* says that early in January of this year a young woman and two children ate some ginger cakes bought in a small shop in a suburban village. Shortly afterwards they became very ill, with choleraic symptoms. One of the patients suffered from vomiting, one from severe abdominal pains, and all three from diarrhœa. The remaining cakes were examined for ordinary poisons, but none were found. They were soft, and had evidently swollen from their original dimensions. They were in great part covered with minute cryptogamic vegetations, composed of *penicilium glaucum*, and the blue *ascophora mucor*. On breaking into the cakes, several cavities were found in them, which were lined with fungi, most of which belonged to the species *ascophora nigricans*, but not a few were of a species that could not be identified. In addition to the moulds, there were numerous bacteroid bodies. A portion of the cake, weighing 135

grains, was kept for three hours in a water bath; it was then eaten by a mouse; another portion was subsequently given; the next morning the mouse seemed perfectly well. The same quantity, without being heated, was given to a mouse, and in less than two hours the animal died, death being preceded by diarrhœa and spasmodic action. It is probable that among the ordinary fungi which appear in decaying food, and which do no harm, there are occasionally moulds or other low forms of life—animal or vegetable—which are highly poisonous.

From the same source we note the case of a man and his children, who, having partaken of butter and cheese in the evening, became very ill during the night. The father awoke, four hours after he had taken his meal, with violent headache; vomiting and diarrhœa followed, and continued during the whole night and the following morning. The children—four in number—had suffered from the same symptoms as their father during the night, and three of them were affected with diarrhœa all the following day. The youngest child, aged three, *did not have vomiting*, but cried all night, and died early on the following day. A post-mortem revealed extravasated blood in the lungs, which were slightly congested. Left ventricle contained liquid blood; the right auricle contained numerous soft and recent clots. The abdominal viscera did not present any abnormal appearance that would account for death. The mother of these children, who had not partaken of the cheese, remained in her usual health. The cheese in question had a greasy texture, a yellowish hue, and an intensely rancid odor, combined characteristics which must always be regarded with suspicion. It is, perhaps, some chemical products of putrefaction and not fungi which cause rancid cheese to be noxious, for cheese is often in a putrescent state and remarkably free from moulds, while, on the contrary, mouldy cheese is often free from decided rancidity. (These two cases point two morals: 1st. When called to a case of sudden sickness, presenting symptoms referable to a deranged stomach or bowels, inquire into and examine the remnants of the last articles eaten. 2d. The necessity for the establishment of commissions to examine and analyze all articles of food offered for sale.—Ed.)

Illness Caused by Filth in Milk.

Dr. C. A. Cameron, Chief Medical Officer of Health for Dublin, reports, in the Dublin *Journal of Medical Science*, the following interesting facts concerning a hitherto scarcely noted cause of milk impurity. A specimen of milk was submitted to him for examination, which was believed to contain a toxic substance of some kind, for the following reasons: Three children who were in the habit of drinking largely uncooked milk, were taken sick. They presented furred tongues, and gastric symptoms, such as are usually present in the earlier stages of enteric fever. Temperature 104.5° F. The house was new, in a healthy location, and no bad odors had been noticed. The sanitary arrangements were in good order. The children had been healthy two days before. A general examination of the milk in stock was made; it presented a peculiar appearance, the cream which had risen to the surface having a deep brown color. A short time before the children's illness a similar brown stratum had been observed on the milk. Generally the milk presented no peculiar features. The composition was found to be—

Water	87.10 per cent.
Fats	3.56 "
Other solids	9.34 "
	100.00

It was, therefore, milk of good quality; but a microscopical examination of the cream taken from this milk revealed the presence of cow's hairs, minute particles of straw, and *débris* of organic matter in great abundance. There were numerous monads, vibrios, and bacteroid bodies. The odor of the cream was slightly but distinctly unpleasant. A subsequent visit to the dairyman was made. He at first loudly protested that he sold only *pure* milk. The cows were examined and found healthy; no cause whatever could be discovered for the impurities. Finally, on pressing the milk vender for an explanation, he stated that the cows were milked early in the morning, by his nephew, who had no light with him, and omitted to wash the teats of the cows before allowing their milk to flow into the milk pails. As some of the cows had lain down all night in such a way that their udders were in contact with the manure in or close to the channel courses, their teats were covered with filth. (A word to the wise is sufficient; this report demonstrates how easily good, pure milk can be rendered poisonous, and the remedy suggests itself at once to every intelligent man.—Ed.)

Treatment of Cardiac Asthma.

The *Union Médicale* states that M. Dujardin Beaumetz recommends the use of bromide of potassium in those cases of intermittent dyspnœa which are really a cardiac asthma, and

which are so frequently attendant on aortic affections. Owing to its action on the bulb, this salt will be found valuable in all conditions of dyspnœa and angina. Small doses of pure, crystallized chlorhydrate or bromhydrate of cicutine may be added to it. Iodide of potassium in progressive doses of from one to four grams (gr. xv–ʒj.) is also serviceable in asthma from aortic affections. When the paroxysms moderate, the patient should only take about grs. xxij, daily. Another remedy, recommended by Professor Sée, consists in inhalations of iodide of ethyl. The patient should breathe from five to ten drops, five to eight times daily. Finally, subcutaneous injections of morphine have been found of benefit.

Special Reports.

NO. III.—INFECTIOUS DISEASES (Continued.)

As a fitting conclusion to our several reports on infectious diseases, we will give this week a summary of the remote effects of these diseases on children.

We are all aware, but we do not sufficiently realize, that many of the chronic derangements of children are due to the remote effects of infectious diseases. We all realize that fatal kidney disease, in not a small proportion of cases, supervenes as an effect of scarlet fever, and from this knowledge we gain a warning not to be disregarded, namely, that the sensitive and denuded cutaneous surface of the child convalescent from scarlet fever must be scrupulously protected from the action of cold until such time as it shall have put on a new covering.

We are also taught that various forms of paralysis are liable, frequently, to be manifested as sequelæ of diphtheria, and we are thus forewarned to be on the lookout for and promptly meet them when they do occur. But in a recent address, delivered by Dr. James Carmichael, extra physician to the Royal Hospital for Sick Children, at Edinburg, attention was called to the fact that we do not sufficiently note the influence of infectious diseases in the production of subsequent ill health. He says, "In the out-patient room of a children's hospital, the oft-repeated expression of '*falling*' or '*wasting away*' is one of the most frequent which the physician hears. A careful physical examination, in a large proportion of cases, will be sufficient to reveal the presence of some disease. Not unfrequently, however, such exploration fails to throw any light on the case, and it is only after an attentive consideration of its history, and a more prolonged study, that we can arrive at any conclusion as to its nature."

The truth of this picture must be evident to every practicing physician, who, surely, has often had brought to him children who, their parents say, do not seem well; they offer no definite symptoms, neither can the most careful examination reveal any positive disease. They do not eat well; they start and cry out in their sleep; caring but little for play or the ordinary pursuits of childhood; they seem listless and languid, preferring to remain about the mother's knee, and being nursed and petted. The slightest indiscretion in their care and management will precipitate some acute derangement.

A careful and persistent inquiry into the past history of many of these cases will elicit the fact that at a greater or shorter interval they have had some infectious disease which, being regarded as one of the necessary concomitants of childhood, has created no alarm and has been forgotten, but upon refreshing the memory, it will be discovered that this condition of depraved health manifested itself shortly after the supposed complete recovery from the disease.

We know that all zymotic diseases most profoundly impress the blood; we might then imagine that in many cases this action upon and alteration of the vital fluid would so influence the various parts of the body nourished from it, as to modify and depress their vital activity to such an extent as to interfere with their thorough physiological life, producing thereby a condition of languor and imperfect performance of duty incompatible with perfect health, yet not sufficiently definite to constitute any particular disease.

If, however, such imperfect nutrition and incomplete vital phenomena are permitted to persist unchecked and unrelieved for a length of time, they may ultimately eventuate in irreparable disease of some vital organ. Thus, then, it becomes important that we should recognize and be warned against this possible future danger, that we may check it in its incipiency.

Dr. Carmichael tells us that the most common causes of chronic ill health in children are syphilis, rickets, and scrofula. They all act, of course, in the same way, and their gross pathology is easy of comprehension. They consist essentially, as we know, in a foul and poisoned condition of the blood, which we can readily conceive must poison and contaminate all the organs and parts it touches. He reminds us, that when we ask the question, "Has the child ever had any previous

illness?" the reply is usually in the negative; but when we supplement this by the question, "Has the child ever had measles, scarlatina, or whooping cough," an affirmative is at once given, thereby conveying the impression that mothers consider these diseases of little or no importance in the catalogue of their children's ailments.

Some years ago, a young physician of great promise, who had just graduated with high honors, was substituting for a medical friend who was resident physician in one of our hospitals. He was called upon to amputate a gangrenous limb. When cutting through the bone, the saw slipped, inflicting a slight wound on one finger. A few days subsequently he was seized with convulsions, and within seventy-two hours died of Bright's disease. The existence of the disease had been unsuspected, but it was remembered that some eight or nine years before he had scarlatina, from which his family then remembered that he seemed to never have thoroughly recovered, although they paid no attention to his condition before the supervention of the convulsions, since he presented at no time any definite symptoms of ill health. It would seem, here, that the disease had remained dormant for years, until excited and stirred into fatal activity by the absorption into the system of the gangrenous poison from the amputated limb.

In obedience to the generally recognized law, that organs or functions develop tendencies to disease in direct ratio to their normal or physiological activity, Dr. CARMICHAEL notes that in children the acute diseases are a fruitful cause of initiating chronic disturbance of function or disease in certain organs, or systems, which present great functional activity in the early periods of life. He says that a certain proportion of those children who are attacked with measles, scarlatina, or whooping cough, suffer immediately or remotely from chronic ill health, which may or may not be accompanied by some organic affection of internal organs. Among the more ordinary conditions, he notes *general debility*, as a result of which the child may fall a prey to some other disease, the ravages of which, once started, the debilitated system is unable to resist. Lymphatic glandular affections may follow any of these diseases.

During convalescence from measles and whooping cough we must ever remember that the bronchial lymphatic glands have, during the course of the disease, been enlarged and irritated, and that they may remain so, giving rise to ultimate caseous degeneration of the glands, debility, and death, or may cause secondary general tuberculosis, which usually causes death in children by meningitis; and this brings him to say a few words as to the diagnosis, more particularly, of enlarged bronchial glands. These glands are situated in the posterior mediastinum, in immediate relation to the bifurcation of the trachea and the roots of the lungs. On the surface of the body the site of the former corresponds anteriorly to the first bone of the sternum, posteriorly to the second or third upper dorsal vertebræ. The glands are ten or twelve in number, and lie in the cellular tissue of the posterior mediastinum, in close relation to the trachea and bronchi. It may be at once stated, as a fact generally admitted, that, although considerably enlarged, their recognition by physical exploration is usually attended by negative results. One of our most careful clinical observers of disease in children states, "In order to afford signs of its presence, the disease of the glands must be sufficient to produce considerable enlargement; for unless their size is so much increased as to produce derangement of function in neighboring organs, the lesion is one which cannot be satisfactorily diagnosed." It may be stated, likewise with tolerable probability, and my own experience bears this out, that in the larger proportion of all cases met with, and in those in which serious results follow the chronic glandular hyperplasia, the enlargement has not been sufficient to cause injurious pressure on neighboring structures. If this be the case, the usual signs which are described as denoting the presence of these buboes, such as venous turgidity and lividity of the face and neck, dyspnœa and spasmodic cough, and dullness, either anteriorly over the upper sternal region, or posteriorly, will not be present.

In general terms, it may be stated that, given a child who has suffered within a year or eighteen months previously from either of these diseases and who is in a chronic state of ill health, undergoing progressive wasting, with no symptoms of disease of any internal organ, the probable existence of bronchial phthisis, more rarely of mesenteric phthisis, may be suspected. The two following cases from the experience of Dr. CARMICHAEL thoroughly illustrate this position:—

Alex. McD., aged 2½, was brought to the Royal Hospital for Sick Children, on 8th of February 1881, suffering chiefly from debility and wasting. The mother stated he was a healthy child till he was attacked by measles, a year ago since which he has never been quite well. He was a breast baby. There were no marks nor history of syphilis. On examination, all organs yielded negative results as to signs of disease. There was nothing positive in regard to the child's con-

ition but progressive emaciation. He was nder careful observation for five months, and he course of the case was watched with interest y the gentlemen attending the out door clinic. ventured to express an opinion, many weeks efore the child died, based upon the general istory of the case, and its negative clinical fea- ures, but more particularly on account of the ntecedent history of measles, that subsequent o this disease, and as a direct result of it, bron- hial glandular hyperplasia had been established, ollowed by caseation of the glands, and that robably general tuberculosis would follow, or vas then actually existent. The subsequent his- ory of the case amply verified such a diagnosis, he child succumbing to meningitis a few weeks fter. On post-mortam examination, the tracheo- ronchial lymphatic glands were enlarged and aseous, the lungs, liver, and other organs studded with small, gelatinous-looking, so-called miliary ubercles, and the brain presented all the usual haracters of meningitis. This is a very ordinary istory, as the records of our hospital testify.

Marion C., aged 3 years and 8 months, was brought to the hospital on August 10th, 1880. She was a healthy child, and never suffered from any illness until six months ago, when she was attacked with pertussis, which lasted for four months. Since then she has been quite free from cough, but her general health has not been satis- factory. On examination, she was not an un- healthy looking child, being fairly well nourished. She was, however, languid and listless, had little appetite for food, the bowels were irregular, the muscular system was soft and flabby. Ordered emulsions of cod liver oil, regulation of diet, and change of air, if possible. On the 13th inst., or three days after examination, she began to be troubled with vomiting, coming on at irregular intervals, without reference to the ingestion of food. On the 15th inst. drowsiness supervened, and she sank rapidly, from meningitis. On post- mortem examination, the brain presented all the usual signs of basic meningitis and general sub- arachnoid effusion. The ventricles contained about six ounces of fluid. The lungs, liver, kid- neys, and peritoneum were studded with tubercles. Broncho tracheal glands enlarged and caseous.

Nasal catarrh, that may persist throughout life, is a frequent sequel of measles and scarlatina.

Thus, then, we comprehend the dangers that may arise, subsequent to an attack of any one of the zymotic diseases. This knowledge teaches us in no uncertain terms the lesson that we have not always cured our little patients, when we have safely piloted their delicate bodies through the text book stages of a zymotic disease. We must have them under our observation for a long time, and in all cases where any degree of debility persists for two or three weeks after the subsid- ence of the disease proper, it must be removed. For this purpose, cod liver oil, the syrup of the phosphates of calcium and iron, as well as other tonic treatment, must be resorted to. Indeed, it would be a good rule, and one that would insure your being on the safe side, were you to place every child convalescing from an infectious dis- ease upon this tonic treatment, and surround it with the best possible hygienic measures.

Correspondence.

Diphtheria.

Ed. Med. and Surg. Reporter:—

It will not be amiss, in connection with the concise study of this disease presented in the "Special Reports" of your issue of the 4th in- stant, to draw a brief practical lesson.

The glory of medicine as a science and art, is to avert and heal disease. To these points all its lights converge. A properly adjusted experi- ence is present knowledge, and a guide to future wisdom.

As a study and basis of experience to others, I wish to again call attention to the value of the liquor potassa in this disease. In June, 1876, my experience to that time was given in the Boston *Journal of Chemistry*, and reprinted in the Reporter. The results of additional ex- perience were given to Dr. F. M. Peterson, of Greensboro, Alabama, and by him incorporated in his thorough and exhaustive article on the subject in the "Alabama State Medical Trans- actions," for 1881. Two cases have been treated since then, making a total of forty-three cases, with three deaths; a limited experience compared with many others, but wide enough to be at least suggestive and hopeful.

How this treatment may bear the test of other localities, with different climatic surroundings, I cannot say, but it is to this point of test that I wish to lead the minds of the profession, as one of the at least hopeful means of waging successful war with this fearful disease.

The usual method adopted by me is as follows: Suspecting or recognizing the disease, if a pur- gative is needed, which I have not often found to be the case, I give, preferably, as the safest and surest purgative, a full dose of calomel, suit- able to the age of the patient. If the patient is an adult, twenty drops of the liquor potassa are given in half a glass of water every three hours, with proportionate doses for children; two drops being the dose at same interval for a child one year old. Between each dose I give, each hour, full doses of the syrup of lacto-phosphate of lime, freshly made; the formula for making is given below. The dose for an adult is one or two tablespoonsful at the above mentioned interval, increasing the dose with increase of debility. It may be diluted or not, as preferred. Full pro- portionate doses for children. I rely on this as a powerful adjuvant. It has almost incomparable value in staying the waste of the system in all asthenic diseases, and in promoting assimilation; and besides, I am led to believe, has some specific value in neutralizing the poison.

We have here two medicines, one tasteless in its dilution, the other exceedingly palatable; great points of advantage in themselves. The liquor potassa destroys the vitality of the poison,

the syrup of the lacto-phosphate of lime sustains, prevents breaking down, and probably, has a specific control over the poison. What more can we desire in the therapeutic art, if a larger experience shall confirm the value of this method of treatment. Later in the disease, when the membranous exudation has given way, I use this syrup of lacto-phosphate of lime in its emulsion with cod-liver oil. The emulsion to be freshly prepared. If the heat of the skin is great, the body is freely and often anointed with bacon rind, till the temperature is reduced. No local applications are made to the throat, internally nor externally, save the free use of the bacon rind. For diet, boiled sweet milk, buttermilk, and some of the malt extracts. Lemonade is also given freely, when desired, as a drink.

As a matter of course the physician will investigate the cause. In one of my fatal cases, evidently decaying Irish potatoes under the house produced the disease. This practice of storing away Irish potatoes under our houses, elevated from the ground on brick pillars, as they are, and open for free access of air, is a common one in our latitude, eminently productive of organic disease, and need only be mentioned to be condemned. If this article shall lead others to a full and careful test of the practical value of the above course of medication, my object will be gained. It will be found, by crucial test, that other remedies are adjuvants. I believe the liquor potassa, from my own point of observation, to be the nearest approach to a remedy yet known, to destroy the poison of the disease.

SYRUP LACTO-PHOSPHATE OF LIME.

℞. Choride of calcium, ℥ j
Phosphate of soda, ℥ iv
Concentrated lactic acid (best), f℥ j. M.

SIG.—Dissolve lime and soda in separate waters, mix solution, wash precipitate on filter, and dissolve it in the acid, filter and mix with simple syrup, to two and a half pints.

EDWARD H. SHOLL, M.D.
Gainesville, Alabama, February 21st, 1882.

Mustard in the Treatment of Smallpox.

ED. MED. AND SURG. REPORTER:—

Just before the close of the war I was called to prescribe for a Confederate soldier, suffering with great nausea. A large mustard plaster was ordered to be placed over the stomach. A few hours afterward my attention was directed to an eruption covering the part where the mustard had been placed. It was a well developed case of smallpox. There was no eruption on any other part of the body. The pustules were well developed, with the characteristic pit. I did not have another opportunity to try it, but believe a mustard plaster applied to any part of the body will bring out the eruption twenty-five to thirty-six hours earlier than usual, so that a diagnosis can be made on the first day of the fever. I believe it possible to invite all the eruptions to any part of the body, and thus avoid the pitting of the face. And in malignant cases, where the poison produces death before the eruption appears, the mustard might possibly bring out the eruption and save the patient. The experiment is easy and harmless.

E. S. LYNDON, M.D.
Athens, Ga., Feb. 20th, 1882.

The Prevention of the Zymotic Diseases.

ED. MED. AND SURG. REPORTER:—

In carbolic acid, I think, the profession will find a preventive of the zymotic diseases; I refer particularly to three diseases: diphtheria, scarlet fever, and typhoid fever. When an epidemic of either of these occurs, and my plan of prevention is thoroughly carried out, the result has always been, either the progress of the epidemic has been checked entirely, or the severity of the disease lessened; a malignant type changed to a mild one; individuals and families who adopted my suggestions would have the disease in a light form, or escape entirely, while those who did not receive my treatment would contract it in a malignant form. My custom is, when a case of either of the above mentioned diseases occurs, to commence immediately the internal administration of carbolic acid (with directions that the clothing, person, etc., should be washed in a weak solution of the acid) to all those of a family or community that I judge would be likely to contract the disease. These statements may not be credited, Mr. Editor, and all I ask is that skeptics and critics will try my method before they condemn it.

W. W. BROWN, M.D.
Kabletown, W. Va., Feb. 15th, 1882.

NEWS AND MISCELLANY.

Canal Boat Children.

In France no child under fourteen years of age is allowed to live or work in a canal boat, and no woman is permitted to live in the barge cabins without special permission from headquarters, although there is ample space for them. To prevent breaches of the law in these respects, special officers are appointed by the Government to board the boats, barges, etc., at certain points.

When a Lady's Horse Shies.

Those of our readers who reside in the country and are accustomed to depend on horses for the transportation of themselves, their wives and daughters, may derive a valuable hint from the following, which we take from the London *Lancet*:—

It is an unpardonable crime to mount a lady—however good a rider she may be—on a horse that shies. If, however, an animal addicted to this serious habit is intentionally ridden by a female, she should sit on that side that gives her the least risk of being unseated. Young girls are trained to ride some days on one side and some on the other side of their ponies, for the sake of their figures. It would be well if women kept up the practice. This alone would give a lady a firmer seat on a horse, and by simply adapting the saddle to the peculiarity of the particular horse when a risk was intentionally run, the danger of accident might be minimized. Most

horses shy more from one side than the other, and many only on one side, as when the sight is failing in one eye. It is curious that even practiced riders, who are well versed in horse flesh and manners, scarcely ever take the trouble to examine the eyes of the strange horses they mount casually.

Cleanliness next to Godliness.

An exchange says, "To the peasant, the Russian bath, a moist variety of the Turkish bath, is a 'second mother.' When Peter the Great was advised by foreigners to introduce hospitals and dispensaries into Russia, he was wont to reply that Russians needed nothing else as a health-giving remedy against mortal ills, when they had baths."

Flowers in Sleeping Rooms.

A correspondent, commenting on a note in our issue of February 11th, on "*Flowers in Sleeping Rooms*," refers to some papers on this subject written by Dr. J. M. Anders. These papers take the ground that growing plants are beneficial to health, and are very excellently written. It would seem, however, that this question has never been definitely settled one way or the other. It would appear to be an open question, upon which discussion is desirable.

Gout.

The London *Medical Times and Gazette* thus replies to a correspondent: Touching gout, the great Sydenham consoled himself with three satisfactory reasons: 1. That more wise men had it than fools. 2. More rich than poor. 3. That it was more incident to men of strong than of weak constitutions. Some wise men think it dangerous to cure gout, and Shakespeare, who had a good notion of physic, says, in *Cymbeline*:

> "One that's sick 'o the gout had rather
> Groan so in perplexity, than be cured
> By th' sure physician, *Death*."

The Coming Sanitary Congress at Newcastle-on-Tyne.

Recently a deputation from the Sanitary Institute of Great Britain, consisting of Professor F. S. B. F. DeChaumont, M.D., F.R.S., Chairman of the Council, Mr. G. J. Symons, F.R.S., Professor W. H. Corfield, M.A., M.D., Chairman of the Exhibition Committee, the Secretary, and the Curator of the Exhibition, met the Mayor and Sanitary Committee at Newcastle-on-Tyne, to make arrangements for the Congress and Exhibition which is to be held by the Institute in that town in the autumn of this year. Several buildings were visited, and suitable ones selected for the various meetings and the Exhibition. The Congress and Exhibition will be opened on Tuesday, September 26th.

Green Oysters.

Dr. Gaillard, in the *Annales d' Hygiene* (Dublin *Journal Medical Science*), states that oysters acquire, by confinement and other conditions, a green color, which is probably due to disease of their livers. This diseased state appears to cause an increase in their adipose tissue, and, consequently, of their succulence. These green oysters command a high price, therefore the art of adulteration has stepped in, and oysters are artificially colored by dipping them in solutions of copper salts. In a dozen oysters colored by this method chemical analysis demonstrated the presence of 0.147 grain of metallic copper, a quantity capable of exciting vomiting and other perturbations. Persons who had eaten only seven of these artificially colored oysters felt unwell. The suggestion is made to wash the suspected oysters with a solution of acetic acid and the dipping of a needle into the washings. If copper be present, it will be deposited upon the needle.

Maternal Impressions.

Dr. F. J. Baker, of Lockport, N. Y., sends us a circular letter asking information on the following points; if any of our readers can assist him by sending any knowledge they may possess on the subject to the above address, they will be assisting the progress of science:—

1st. Have any cases come to your knowledge or observation, of fœtal deformities or "marks" attributable to mental impressions on the mother during pregnancy?

2d. Have you any knowledge of cases tending to establish the doctrine of materno fœtal symmetry, bearing particularly on ante-natal education?

Any information you may be able to give which will assist us in cultivating this interesting field of study will be most gratefully acknowledged.

South Africa as a Field for Medical Practice.

Jas. S. McDonagh writes to the *Lancet*, under date of January 30th, 1882, as follows:—

The Africans have an idea that the medical men who go out to settle among them are the refuse of home produce, and unless a man has superior qualifications or settles in a remote part of the country, they are chary in seeking his advice. In Cape Town, seventy-five cents for a visit and medicine is the common charge. Living is very high; he has known as much as one dollar and ninety cents to be paid for a cabbage. The day when men went out to South Africa and made fortunes in a few years is passed. The inhabited parts are overstocked, and unless a man settles in these with the best qualifications or proficiency in some specialty, *e. g.*, ophthalmic surgery, and can afford to wait, he had best remain at home.

Items.

—The Boston *Medical and Surgical Journal*, says: "L'entrée est défendue aux dames" is certainly not a suitable inscription to be placed over the portals of a University; and it is satisfactory to be assured by the President of the Boston University, in his last report, that a phrase so often seen over certain apartments in French railway stations will be denied a place upon the front of the University building.

OBITUARY NOTICES.

DR. THEODORE LEWIS MASON.

Dr. Theodore Lewis Mason died at his residence, in Brooklyn, N. Y., of pneumonia, Feb. 12th, 1882. Dr. Mason was born at Cooperstown, Otsego County, New York, September 30th, 1803. His father, Daniel Mason, a lawyer, was a lineal descendant of the famous John Mason, one of the founders of Norwich, Connecticut, and for years a member of the Council, the Lieutenant-Governor, and Commander-in-Chief of the military of the State. His mother was a daughter of the Rev. Dr. Lewis, of Greenwich, Connecticut. He graduated from the College of Physicians and Surgeons of New York in 1825. After practicing a while in Wilson, Conn., he moved to New York, and settled in Brooklyn, in 1834. Dr. Mason manifested great interest in the treatment of inebriety as a disease, and was President of the Inebriates' Home of Kings County, and later was President of the American Association for the Cure of Inebriates. He was a resident Fellow of the New York Academy of Medicine, a member of the Medical Society of the County of Kings, and was President in 1842 and 1843. He was a permanent member of the American Medical Association and of the Medical Society of the State of New York. He was one of the founders, life member, and Director of the Long Island Historical Society, a member of the American Colonization Society, and its Vice-President in 1874.

ROBERT BRIDGES, M.D.

Dr. Robert Bridges, Emeritus Professor of Chemistry in the Pennsylvania College of Pharmacy, died at his residence, No. 119 South Twentieth street, February 23d, 1882, in the seventy-sixth year of his age. Dr. Bridges was a native of this city, and a constant resident during all the years of his active and useful life. He graduated at the University of Pennsylvania, both in the department of arts and in that of medicine; the latter in 1828, six years after the establishment of the College of Pharmacy, an institution to which he was afterward to render services so valuable, faithful, and so long continued. His services were held in such high esteem by all associated with the College of Pharmacy that when increasing years and infirmities warned him to tender his resignation, he was at once elected Emeritus Professor of Chemistry, and so continued during the brief remainder of his life.

Dr. Bridges being a physician, as well as a chemist, was a fellow of the Philadelphia College of Physicians and Surgeons, and for many years, in addition to the duties of his professorship, discharged those of librarian to the last-named institution. He was a man of active mental constitution, a patient and systematic thinker, and a polished and lucid writer, and the scientific journals of the country were enriched by many contributions from his pen. He was also the American editor of *Fowne's Chemistry*, which, by its extensive circulation, made his reputation national.

For the last two years Dr. Bridges has been a sufferer from a complication of diseases, which, as became plainly evident some weeks since, could have no other than a fatal termination. In private life Dr. Bridges was a gentleman of high intelligence and kindly manners, proceeding from genuine goodness of heart and innate benevolence. To his immediate relatives he was tenderly attached, and his house was as a home to those near and dear to him; but, singularly capable as he was of appreciating household happiness, he never married.

DR. SAMUEL WHITALL.

Dr. Samuel Whitall, one of the best known physicians practicing in New York city, died February 18th, 1882, at his home, No. 607 Lexington avenue. A week previous he was attacked by malarial fever and acute bronchitis. His death was sudden and altogether unexpected. He was but forty-one years old, and has generally enjoyed excellent health. Dr. Whitall was born in Woodbury, N. J., and was educated in the drug business in Philadelphia. He went to New York soon after his majority had been attained, having graduated in medicine. He was a member of the Pathological Society, and of the Physicians' Mutual Aid Association. For many years, and until the time of his death, he was Superintendent of the Colored Home Hospital, First avenue and Sixty-fifth street. During the latter years of his life he became a frequent contributor to medical journals, and his opinions were quoted as authority. He was prominent in the Orthodox Society of Friends, and was noted for his charities. He was a widower, and leaves no children.

—Victor Theodore Junod, the celebrated Swiss doctor and author of medical works, is dead. He was born in the Canton of Vaud, in 1804. When a young man he went to Paris and became known for his inventions of cupping glasses and therapeutical bell-glasses. He received the Montyon prize in 1836, and the grand prize of medicine and surgery in 1870, besides several medals at the London, Paris and New York exhibitions.

—Lucius L. Pettengill, the last surviving son of Samuel C. Pettengill, M.D., died at Hancock, Delaware County, New York, on the eighth day of February, 1882, in the fortieth year of his age.

QUERIES AND REPLIES.

A subscriber would like to know the medical properties of Chionanthus Virginica or old man's beard.

MARRIAGES.

CRESSWELL—BOYD.—On Tuesday, February 7th, 1882, by Rev. J. Mateer, D.D., Dr. John Cresswell, New Bethlehem, Pa., and Miss Sadie M. Boyd, Rimersburg, Clarion Co., Pa.

DEATHS.

DIXON.—George B. Dixon, M.D., suddenly, on the 23d of February, at Pilatka, Florida.

NEWBERRY.—At Corralitos, Mexico, February, 11th, C. G. Newberry, M.D., eldest son of Prof. J. S. Newberry, of Columbia College.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1307.] PHILADELPHIA, MARCH 18, 1882. [Vol. XLVI.—No. 11.

Original Department.

Lecture.

ASYSTOLISM.

Delivered at the Hôtel Dieu.

BY M. RAYMOND,

Professor Agregé of the Paris Faculty.

Gentlemen—I wish to call your attention again, to-day, to two patients, one of whom died a few days since.

The autopsy was made before you, and as you may remember, there existed chronic lesions of the lungs.

Again, toward the close of life the patient presented somewhat remarkable delirious symptoms, which merit careful consideration. The other patient, now before you, has heart disease, and presents also chronic pulmonary lesions. I will commence my lecture by the consideration of her clinical history.

The patient is thirty-nine years of age, and entered the hospital August 30th. She suffers, as you observe, from intense dyspnœa. The respirations are short and very frequent, fifty-two per minute. The face presents a generalized yellowish tinge, but the cheeks have the bluish coloration of cyanosis, rendered more evident by the jaundiced color of the rest of the face. The eyelids are œdematous; the neck appears tumefied; the lips have a well marked, bluish, cyanotic aspect. The venous system is dilated over the entire body, in the neck, at the upper part of the chest and in the hands and feet, which are cyanosed and cold. The lower limbs also are considerably swollen and œdematous; all the natural prominences have disappeared, and the slightest pressure with the finger causes pitting. The patient complains of vertigo and ringing in the ears. At night she is obliged to remain propped up with pillows, and enjoys but a broken rest, for her slumbers are disturbed by terrifying dreams. From time to time she suffers from intense pain in the right hypochondrium. This pain, not limited to any special point, is augmented by pressure over the hepatic region and extends at the back to the right shoulder. The pulse is small, miserable, and irregular, hardly perceptible, and sometimes intermittent. The heart impulse is diminished, and sometimes even it appears entirely absent, or at least so feeble as to be scarcely perceptible.

The cardiac dullness is somewhat augmented transversely. The heart sounds are so feeble as to be distinguished only with difficulty, but there is no evidence of murmur. The second sound is more marked than usual over the pulmonary artery.

There is no asystolic murmur at the right of the sternum or near the epigastric region. The jugular veins are prominent, but there is no venous pulse, nor is there any trace of hepatic pulsation.

The patient is not only in a veritable state of orthopnœa, she has also abundant muco-purulent and yellowish expectoration.

The methodic examination of the chest gives the following results: Over the sub- and supraspinal fossæ on the left side there is almost absolute dullness on percussion over a space of about fifteen centimeters. At the central part of this side of the chest the sound is normal, perhaps slightly tympanitic; at the extreme lower part is a narrow zone of dullness.

Percussion over the anterior aspect gives the same results as posteriorly; dullness at the upper part of the chest, but normal sound over the remainder. On the right side of the chest the *sonority* is normal over all the superior part, before and behind; there is a zone of slight dullness at the inferior part posteriorly.

On auscultation tubular breathing is found on the left side, at the points where dullness is most marked; it is most evident with the inspiration.

There exists, also, bronchophony at these points, but no râles are present, even when the patient coughs. On the contrary, over the rest of the chest sonorous and sibilant as well as subcrepitant râles are found. These last are most marked inferiorly and particularly on the right side.

Anteriorly, blowing respiration is found under the left clavicle, and râles similar to those detected posteriorly, but much less numerous, are found over the remainder of this aspect of the chest.

The abdomen is soft, somewhat tympanitic and painful in the hepatic region; the tongue is normal; appetite and digestion good, and but slight tendency to constipation.

The liver, manifestly augmented in volume, extends a space of two finger breadths below the false ribs; the spleen also is somewhat enlarged.

The urine is dark-colored and scanty, but presents no traces of albumen.

When she entered the service her morning temperature was normal, 37.6° C., the evening temperature being always somewhat higher, about 38° C.

According to the patient's very lucid statement, there exists no hereditary predisposition to any particular disease. When fifteen years of age she suffered from a violent attack of acute articular rheumatism, affecting all the large joints. The attack lasted two months, and since that period she has frequently suffered from slight rheumatic pains, particularly when fatigued, and these pains were accompanied by palpitation of the heart. At 22 years of age she had a slight attack of jaundice, lasting five weeks, and ten years later a second attack, of much longer duration. It was at this period that she commenced to cough, and the limbs for the first time became swollen. Since then she is much subject to similar symptoms, œdema of the limbs and repeated attacks of bronchitis, which lasted four months, without affecting her general health.

When respiration became too painful and the limbs very much swollen, she entered some hospital service, generally during the month of April, and after fifty or sixty days' sojourn she was able to leave the hospital, apparently cured, and again take up her daily labor until the same symptoms supervened again.

On the 12th of August these symptoms appeared more formidable than ever before, and were accompanied with considerable hæmoptysis; about two large glassfuls of red, spumous blood were expectorated; this was the first attack of hemorrhage the patient experienced. For the last six months the menstrual flow has been arrested. Such, then, is the clinical history of our patient; it now remains for us to interpret the signs and symptoms observed.

You have recognized, with great facility, that the patient is in a condition of asystolé; as to this fact there is no room for doubt.

But is the term asystolism or asystolé a good one? Is it sufficiently clear, regarded by the light cast on the subject by contemporary research? I do not think so. Beau, who first used this term, said: "We give to these symptoms the name of asystolé, comprising under this denomination, also, the insufficiency of the systole, which is the point of departure, and the sole cause of the asystolic state."

The following objection may be urged against this theory: if such be the case, how does it happen that asystolism is not observed in cases where the heart alone is affected, as, for instance, in the form of myocarditis observed in typhoid conditions. Is it not well known that the heart beat is frequently strong, although the pulse be feeble? And, no matter how feeble the action of this organ, is it not always sufficient to dilate the arteries? How can the multiplied visceral dropsies in asystolism be explained, unless we admit a feeble state of the vessels themselves, which have become incapable of properly emptying the encumbered capillaries, because they are, like the heart, in a state of degeneration? These reflections, according to M. Peter, are true, clinically, and physiology, by demonstrating the reciprocal action exercised by the heart on the vessels, shows that the new theory is well founded. I would advise you to read, on this subject, the interesting pages devoted by M. Vulpian, in his work on the vaso-motor system, to the relations existing between the heart and the blood vessels; you will be able then to understand why, since there is physiological reciprocity, there must necessarily exist morbid reciprocity.

At every point of view, the term cardio-vascular asthenia, proposed by M. Rigal, is preferable to asystolé, and as this author has remarked, the

heart beats may be frequent, unequal and irregular, without cyanosis, dyspnœa, congestions or dropsy; it is the condition to which M. Sée has given the designation arythmia.

If the peripheral circulatory apparatus is normal and the heart diseased, the general circulation may remain good; but if the lesion exists in the small vessels, the slightest trouble in the action of the heart will provoke cardio-vascular asthenia and all its consequences. Some patients with very slight cardiac lesions have all the phenomena of asystolism; while others with considerable disease of the organ do not suffer from them; because the first are young and the peripheral circulatory system is in good condition and capable of extraordinary resistance; the others, on the contrary, are aged, at least as regards their blood vessels, which are hard, atheromatous, and in a degenerated condition. With such a condition, one may easily understand why, when the heart becomes feeble, from whatever cause, the symptoms of asystolé suddenly supervene. M. Peter has, in his clinical lectures, called particular attention to these facts.

Remember, then, that it is necessary, particularly when forming a prognosis, to examine at the same time, and with the greatest care, the condition of the peripheral circulation in conjunction with the state of the heart itself.

Our patient has invariably suffered, at the debut of her asystolic attacks, from pain in the hepatic region; on two occasions she has had jaundice. This happens frequently, and when a large number of patients with cardiac disease are interrogated, it will be found that the mode of development of the symptoms due to the cardio vascular asthenia is always the same for the same patient. You have probably noted that, though there is considerable œdema, no albumen is found in the urine of this patient, and no symptoms of cerebral disturbance are present. The clinical history of the asystolic attack may vary, and does vary much in different patients; sometimes there is predominance of the indications toward some particular organ, and in such case the symptomatology proper to the organ most affected dominates. This fact, first brought to notice by M. Grancher, is of interest.

We should now seek for the point of origin of the very marked cardio-vascular asthenia observed in this case. Modern research has brought to light many new causes capable of inducing asystolism, and I will briefly enumerate them.

Asystolism may be: 1st. Of cardiac or cardio-vascular origin. In such a case, a direct perturbation of the heart itself is the primary cause. Asystolism is a phenomenon which supervenes suddenly, and is generally due to a chronic lesion of the organ.

Much less frequently observed in aortic disease, asystolé may come on suddenly, without obvious pre-existing lesions of the heart or vessels, in patients debilitated by the habitual abuse of alcoholic stimulants, or living under unfavorable hygienic conditions; the heart is, in such individuals, overworked.

Under this category may be classed M. Debove's case, where an asystolic attack supervened on violent palpitations in a patient with exophthalmic goitre. Asystolism is also met with: 2d. In pulmonary diseases. Very rarely observed in acute affections, although cases have been reported of its occurrence in acute pneumonia, by Graves and Grisolle, and in acute phthisis, by M. Parrot, it is frequent in the chronic diseases of these organs, in emphysema, chronic bronchitis and pulmonary sclerosis. It also occurs: 3d. In gastric and hepatic affections; these clinical facts have been recently demonstrated by M. Potain. This teacher has shown that, if the heart reacts on these organs when compensation is broken, reciprocally, the disease of these two organs may induce asystolé, by acting on the right heart, probably, through the agency of the great sympathetic and pneumogastric systems. 4th. Asystolism is observed in kidney diseases, particularly in interstitial nephritis. In this last, three factors are at work in producing the symptoms; the generalized endarteritis, hyperplasia of the connective tissue of the heart and the gastric derangements so frequent in Bright's disease. 5th. In functional nervous diseases, as in hysteria, I know of no case where asystolism occurred, although the attacks of cardiac palpitation are frequently very violent, without, of course, any organic disease of the heart. MM. Peter and Letulle have, however, recently observed, during an attack of acute articular rheumatism, a veritable inflammation of the pneumogastric, the neuritis being characterized by pain on pressure along the side of the sterno-mastoid muscle, in the epigastrium and at the internal portion of the left intercostal space, and accompanied by a marked asystolic condition, characterized by general lividity of the cutaneous surface, the lips being cyanosed and bluish, the conjunctiva yellow; the pulse small and very frequent, 140 per minute: intense pulmonary congestion, etc. M. Huchard has observed somewhat similar phenomena in patients suffering from violent attacks of angina pectoris. 6th. In vascular diseases asystolé is frequent, as in atheroma of

the arteries, and other forms of vascular degeneration.

Among all the causes of the asystolic condition, some will not come at all into consideration, in explaining the symptoms observed in the case before us.

Nothing in all the symptoms to which I have called your attention points to any renal, gastric or hepatic disease.

There is nothing to prove either that the asystolism is of nervous or vascular origin. The woman is young, she has no atheroma of the peripheric arteries, and no bruit over the aorta. We remain, then, in presence of two possible causes of cardio-vascular asthenia, the heart or the lungs. In this particular case we have the facts furnished by the patient, concerning the existence of anterior attacks of rheumatism, of palpitation, œdema of the lower limbs, etc., all of great importance.

When, in connection with these, we have repeated attacks of asystolé, diminution of the præcordial impulse of the heart, transverse augmentation of the cardiac dullness ; notwithstanding the absence of valvular murmurs, which have disappeared on account of the feeble energy of the heart's action, you will conclude that the paroxymal dyspnœa is of cardiac origin, for the pulmonary lesions are not really of sufficient extent, and are manifestly of too recent origin, to be regarded as the cause of the cardio-vascular asthenia.

What are the signs of pulmonary disease present? The signs discovered on percussion and auscultation are sufficient to prove the alteration of the pulmonary parenchyma, but this alteration does not appear to be of the same nature everywhere.

There are evident signs of bronchitis, such as sonorous and sibilant râles and the expectoration ; there is also œdematous congestion of the two inferior lobes, characterized by slight dull ness on percussion and fine subcrepitant râles, but besides this the apex of the left lung seems to be the seat of a special alteration. You have noticed how marked was the dullness and over how large a space it was evident.

Auscultation over these points demonstrates the existence of rude, blowing respiration, together with exaggerated *sonority* of the voice ; in a word, all the signs of pulmonary induration are present.

Of what nature is this induration? Is it a case of ordinary phthisis localized at the apex? I do not think so, for, habitually, tuberculosis is disseminated to the right and left, and in this case the general symptoms and the evolution of the malady are little in accordance with such a supposition. Can it, then, be a case of primary and unilateral cancer of the lung? This supposition is still less tenable, for in such a case there would exist almost certainly infection of the lymphatic glands, or at least there would be intense pain with sanguinolent sputa, and perhaps symptoms of compression. There are no symptoms of bronchial dilatation, notwithstanding that our patient has been for years subject to attacks of bronchitis. The existence of bronchophony and exaggerated thoracic vibrations, as also the nature of the cough, are against the existence of localized chronic pleurisy.

In fact, chronic pneumonia would alone seem to explain or be in unison with the stethoscopic phenomena. And, in effect, in my opinion, there is simply a fibrous metamorphosis of a part of the superior lobe of the lung.

It is much more difficult to determine whether this fibrous metamorphosis is the result of lobar pneumonia or of broncho-pneumonia. Against this last supposition is the fact that there is no bronchial dilatation ; a symptom which, according to Charcot, is characteristic of chronic broncho-pneumonia. It is true that there is nothing in the morbid antecedents of the patient, although she has had frequent attacks of bronchitis, which would permit us to affirm that she has formerly suffered from acute pneumonia. Nevertheless, it is from this order of ideas that the causation of chronic pneumonia must be sought. It is well known, in effect, that among the best demonstrated causes of this malady are those which render the system feeble, such as old age, diseases which induce cachexia, as malarial poisoning, albuminuria, alcoholism and diseases of the heart. As regards this last the authors are not all agreed ; some considering that diseases of this organ frequently induce chronic pneumonia, others claiming that there is not sufficient proof of this assertion.

I am of opinion that there exists no very plausible reasons for eliminating organic diseases of the heart from the causation of chronic pneumonia. The case at present before us seems to me conclusive ; and last year, in this same amphitheatre, I presented the lungs of a woman, forty-four years of age, asystolic, with disease of the mitral valves. Anteriorly she had had an attack of true acute pneumonia. At the autopsy the inferior and superior lobe of the left lung were found the seat of gray induration ; the pulmonary tissue was hard and elastic, entirely impermeable to air, sinking immediately in water.

This part of the lung, with the pleura covering it thickened and fibrous, appeared retracted. Microscopic examination demonstrated that the walls of the alveoli were considerably thickened by fibrous tissue; a few alveoli here and there were filled with a granular substance. There was no trace of bronchial dilatation, nor of cavities of any kind. I have observed two other very similar cases, and I think that in certain cases organic heart disease has a very evident pathogenetic influence.

However that may be, it is certain that in the present case the pulmonary induration of the left apex does not suffice to explain the asystolism. On the other hand, some of the signs indicate recent pulmonary alterations. As I have already said, the asystolé in this case is of cardiac origin and this is the fifteenth attack from which she has suffered.

What is the organic heart disease in her case? It is from the present clinical condition of the patient and from the mode of evolution of the symptoms that a response to this question must be sought. Notwithstanding the absence of murmur, all the symptoms point to mitral disease. The general symptoms, partial and generalized cyanosis and œdema, and the local phenomena, the small, miserable, intermittent pulse, the absence of soufflé, all are proper to mitral affections. I consider, then, that we have here a very grave case of mitral disease. The prognosis is extremely serious, on account of the accentuation of all the phenomena of the asystolic attack, and it is to be feared that this will prove the last.

You have observed the treatment I instituted: I first recommended the most absolute repose, physical and mental. On account of the marked feebleness of the heart, I have given wine, rum, coffee, and easily digested aliments, as the appetite was still good. As heart tonics, I administered $\frac{1}{30}$ of a grain of digitaline, in granules, per diem with subcutaneous injections of ether as an excitant. To relieve dyspnœa, I applied, several times, dry cups and sinapisms to the chest. Dry frictions over the lower limbs were practiced. I gave diuretic drinks, milk, and on account of the constipation, a few purgative enemata. I have not bled the patient, although general bleeding sometimes affords relief, because she is so weak that I feared to induce syncope.

[This patient died some days later, and the lesions found at the autopsy were as follows:—

The heart was enormous, the left auricle being as large as the fist of an adult. There existed typical mitral insufficiency, with considerable hypertrophy of the left ventricle.

There was œdematous congestion of the inferior lobes of the lungs and chronic inflammation of the mucous membrane of the bronchial tubes. There existed fibroid sclerosis of the superior lobe of the left lung.

No traces of chronic pleurisy, but the pulmonary tissue was hard and resisting, sinking in water. On section the exposed surface is brown and dry, traversed by thick, dark lines.

Histological examination shows the walls of the alveoli much thickened by fibroid tissue. There was no bronchial dilatation, no trace of tubercles. The liver was congested and hard; the spleen also indurated and retracted. The kidneys and other abdominal organs were normal. There was no cerebral lesion.]

I will speak more fully concerning the other patient in a future lecture. It was a case of chronic pleurisy with sclerosis of the lung; the patient presented toward the end of life a condition approaching asystolism with violent delirium, necessitating the application of the strait-waistcoat. At the autopsy we found, as I had predicted, considerable cerebral œdema, induced by the asystolic condition. There existed also numerous adhesions between the parietal and costal layers of the pleura, and almost complete sclerosis of the lower lobe of the right lung; the heart was normal.

Communications.

PROLONGED RETENTION OF THE PLACENTA.

BY GEORGE HAMILTON, M.D.,
Of Philadelphia.

In a late number of the Medical and Surgical Reporter is recorded a case of "Long Retention of the Placenta," taken from the *Lancet*. From the statement made, the retention lasted about seven or eight months, a circumstance so unusual as not only to surprise, but, possibly, to suggest doubt as to the accuracy of the report. Yet, if an extended examination be made of the earlier or more recent records upon this subject, the cases will no doubt be found to be more numerous than is generally supposed. Retained placenta, similar in duration to that quoted, has, in my practice of half a century, occurred but once.

It may thus appear that this feature of obstetrics can be of only minor practical importance, and so in fact it is, as a general proposition. The number of such cases actually recorded is, probably, small in proportion to what

it would be if practitioners would faithfully furnish to the medical journals, for publication, the cases of this character which may have occurred in their practice. When retention of the placenta does occur, whether in the early or at a later period of pregnancy, and continues for an unusual length of time, it assumes a degree of importance that entitles it to the earnest consideration and cautious judgment of the accoucheur, that he may be enabled to discover, if possible, the proper method of treatment; for it is to be remembered that on this point various and antagonistic opinions are entertained.

The case coming under my observation was that of a lady residing in the country. She was the mother of two children, and when advanced about two and a half months in her third pregnancy, was attacked with severe labor pains, attended with great discharge of blood. On my arrival the hemorrhage and pain had nearly ceased, many large clots had been thrown away without examination, and thus it was uncertain whether the embryo had escaped or not. About the tenth day she left her bed, having neither pain nor discharge of blood, resumed in part her household duties, and so continued during nearly three weeks, when a similar attack ensued, the pains more violent, but the discharge very much less than in the first attack. Upon examination, as in the first instance, nothing of an after-birth could be detected, yet the symptoms strongly indicated its retention, so that a longer confinement to bed was directed, nourishing food given, quinine and ergot were prescribed, the latter drug failing, on this and subsequent trials, to evince its specific action.

These attacks were repeated at indefinite periods until three months had elapsed, when I sought an office consultation with the late Dr. Naudain, of Wilmington, at one time United States Senator from Delaware. In this consultation his son, practicing medicine in the country, also took part. Neither of them had ever met with a similar case, and both concurred in opinion that if so small a placenta had not passed off in the first attack, it had gradually come away in shreds, by dissolution, or that it had been absorbed; so that the real cause of these repeated prolonged attacks might, with more reason, be attributed to a tumor, or to some special disease of the uterus. No material change in the treatment was proposed by them, nor was any made. Another month had passed away without essential change of condition, when a messenger was dispatched to West Chester, a distance of twelve miles, to summon Dr. Thomas, preëminent in experience and capacity, to the bedside of the patient. On being informed that four months had elapsed since the first attack, he expressed surprise, saying that while he had met with a number of cases of abortion in which the placenta was retained, none of them exceeded four or five weeks, and were finally passed without serious injury to the patients, and without active interference. After careful examination Dr. Thomas said he found nothing to explain the real condition of the patient, and that while it seemed improbable that any considerable portion of the placenta could be so long retained, he did not regard it as impossible, and in this view I concurred, satisfied, as I was, that the woman was advanced about two and a half months in pregnancy, that the first attack was precisely what we are accustomed to see in abortion, and that each subsequent attack was radically but a repetition of the first. The only proposition by the Doctor was to give rather larger doses of ergot and quinine; and before leaving he expressed the opinion that the case would terminate favorably, and the issue justified this prognosis, but not until two months additional had passed away (with the attacks as usual), making six altogether. On the first of the last three visits made to the patient, the nurse, with smiling face, met me at the door, and called out that she had good news for me. She then said that during the previous night the lady had one of her usual attacks, lasting not so long as usual, and leaving her very abruptly, entirely free from pain. On withdrawing the cloths upon which the discharges had been received, the afterbirth, to the infinite joy of patient and nurse, was found. It had not come away in shreds, it had not passed off in decomposition, it had not withered away, nor had it been absorbed, but was nearly as large as the average placenta of a two and a half months abortion; and this was fully explained by observing the side of the placenta attached to the uterus, the numerous vessels severed at the moment of expulsion, and through which the vitality, consistence and bulk of the placenta had been maintained.

In this connection another case of placental retention, of different and more exceptional character, may deserve notice. A lady some years ago desired my attendance for the third time, in confinement. The patient told me that she had yet to go from three to four weeks to complete the full term. After a short and easy labor, she gave birth to a still-born female. The child was at least as large as the average at full period, the head somewhat deformed, the features

of the face idiotic in expression. Waiting a moderate length of time, and no pain occurring, gentle traction upon the cord had no sooner begun than, to my great surprise, it came away, although it appeared to be of average strength and thickness. Ergot was then resorted to, in full doses, but failed to produce pain, nor was there any normal pain of the least importance. On introducing my hand, for the purpose of delivery, it passed readily along between the placenta and the uterus, until it approached the fundus, upon the left side, where the tissue of the placenta became so hard and tough, and the adhesion to the uterus so firm, that prolonged effort at separation was ineffectual. On withdrawing my hand, about half of the placenta was grasped and brought away without any difficulty, for the lower portion of the after-birth was simply a pultaceous (incoherent) mass, void of adhesion to the uterus, but without the odor or appearance of putrescence. The patient was informed that a portion of the placenta still remained, yet she was perfectly calm, although alone, her nurse not having arrived, and expressed the hope that another effort might be successful. This was accordingly made, and while more force was employed than before, and far more than I had ever before or since employed, no impression whatever was made upon the tough and hardened mass occupying the left side of the fundus. Before withdrawing the hand, as much as could be separated from the lower portion of the firmly adherent placenta was brought away, leaving from one-fourth to one-third attached at the point designated.

Fortunately there was no disposition to hemorrhage, nor is this strange, when we call to mind the actual condition of the lower part of the placenta, without adherence to the uterus, and the singular condition of the remaining portion, both in reference to composition and adhesion.

With the cheerful consent of the patient, who placed implicit confidence in my judgment and sense of duty, I left her, and called upon Dr. Beesley for the purpose of consultation. In a large practice he had never met with such a case, but called to mind several instances of retained placenta lasting from one to five weeks, all of which were abortions, of from six to twelve weeks. All these did well, and he strongly approved my purpose to avoid further effort at separation. On my way back to the patient, the late Professor, Dr. Joseph Carson (then Accoucheur to the Obstetric Department of the Pennsylvania Hospital) was called upon, who, when informed of the nature of the case, and the two forcible attempts unsuccessfully made to remove the remaining portion of the placenta, said that the situation of the woman was sufficiently critical, without rendering it more so by substituting for the gentle and most probably successful efforts of nature an irrational and reckless amount of brute force. Before arriving at the residence of my patient a third gentleman was spoken to upon this exceptional case, who, although not an adept in obstetrics, was eminent for his mechanical genius, skillful in contriving surgical appliances, and decidedly remarkable for his ardent, impetuous temperament. The history of the situation of the woman seemed to him alarming, and, after enumerating the sources of danger, hemorrhage, inflammation, pyæmia, putrescence, blood poison, or the formation of a tumor, he ended by saying that he saw no hope for the patient but in the removal, if possible, of the adherent portions of the placenta, without regard to the amount of force required. On reaching the home of the patient, from whom I had been absent an hour and a half, I found her comfortable, suffering no pain of any moment, free from hemorrhage, and when informed of the result of the consultations with Drs. Beesley and Carson, she fully acquiesced in our decision. Before leaving I again introduced my hand, and found no change in the situation. After the fourth day, daily visits only were required, and upon the expiration of the second week the visits were discontinued. As may readily be conceived, the lady, as well as myself, was anxious to know what might result, sooner or later, from the retention of so large and firm a portion of the placenta. It was for this purpose enjoined upon her, from the first day, to have every discharge, whether from the bowels or bladder, closely examined, to ascertain its precise character, and that, so soon as the nurse left, she herself would continue these examinations for at least three months. That this injunction was sedulously obeyed there is no reason to doubt, and when the time had expired, she informed me that she had neither felt nor observed anything different from what had occurred after the two previous confinements. It seems probable that absorption was at work in this case, but whether in this or some other way, nature dealt so gently and effectually, in preparing for another conception, that in less than two years she was again quickly delivered, at full term, of a living child, followed as before by favorable recovery.

As stated above, cases of this kind are so seldom met with that, in a practical point of view, they may, perhaps, be regarded as of slight

importance; yet, if we bear in mind the indisposition of a large proportion of practitioners to report cases, even if specially abnormal, the inference is legitimate that the number is not inconsiderable. Few as they may be, they are of value, especially at the present time. From year to year there seems to be an increasing distrust in the restorative power of nature, and this distrust in a *vis medicatrix naturæ*, is especially manifested in reference to the ability of woman to accomplish, without active interference, that work to which she is specially destined. Influenced by this idea, many physicians are ready to declare impossible that which a few cases of the character just cited prove to the contrary. That placental retention, either in the earlier or later stage of pregnancy, may be so complicated with other adverse conditions as to imperatively demand active and prompt interference, is manifest; while on the other hand it is to be feared that, in the absence of such conditions, the mere apprehension of impending danger in one or another form above named may have suggested and led to the employment of measures, manual or instrumental, that might well have been delayed until their necessity had been more clearly established. In conclusion, we would commend to the serious consideration of those whose faith is weak in the conservative and restorative power of nature, the noble, eloquent, and reverential apothegm of him who has worthily been called the Father of modern surgery, Ambrose Paré, "Je les pause, *Dieu les guérit.*"

SMALLPOX AND VACCINATION.

BY JOHN T. HUDDLISON, M.D.,

Of Glen Mills, Pa.

The Philadelphia *Inquirer* of February 3d contains an editorial notice to the following effect: "Hon. P. A. Taylor, member of Parliament for Leicester, flatly denied the assertion of Dr. W. B. Carpenter, that vaccination is a protection against smallpox. Mr. Taylor says the scourge comes in an epidemic form, at different periods, and when the contagion is in the air the mortality is only reduced by superior hygienic arrangements. He shows by official reports that the plague has recently been as general and as deadly in London and other cities where vaccination is compulsory or universal, as it was before the alleged preventive was used, etc., etc. He makes a strong appeal to Parliament to repeal the Compulsory Vaccination Act, which he believes gives no protection against smallpox, but introduces *vaccine tuberculosis* and other terrible diseases into the human system." He says, "The only way to check the scourge is by '*isolation*,' and cites the condition of Malta, 'where, some years ago, the smallpox appeared; the garrison was *isolated* (the italics are mine) and all the troops revaccinated, but before the year closed over one hundred soldiers were attacked by smallpox and a large number died, even under the best treatment." He neglects to inform us whether or not these deaths occurred among the new troops sent to refill the previously decimated ranks. From his own report, his proposed remedy is utterly worthless, and he might just as well let us retain the one that most of us have confidence in.

I have been engaged in the practice of medicine for considerably more than half a century, and, for a private practitioner, have had pretty extensive experience in the treatment of smallpox and in vaccination, and in noticing the progress of the disease from point to point, and have become convinced that smallpox is never epidemic in the strict meaning of the word, but that the contagion is conveyed in emigrant ships, railroad cars, mail bags, infected paper stock, clothing and other fomites, and, but for very short distances, by the atmosphere, as, in fact, its progress across the American continent is commonly in the face of the prevailing winds.

The origin of smallpox is not known; but it is said to have existed in China and Hindostan more than 1000 years before the birth of Christ, and made its way into Arabia in the year of the birth of Mahomet, 569. Pursuing the track of armies, we find it raging in Egypt in 640, and subsequently, following the victories of the Saracens, in the eighth century, through Italy, Spain and France. By the Saracens the disease was communicated to the Crusaders, "who caused its spread throughout Europe" (*vide* Morse's "History of Smallpox"). There was no smallpox in the New World before its discovery by Columbus, in 1492. It was introduced into St. Domingo in 1517. Three years later, in one of the Spanish expeditions from Cuba to Mexico, a negro, covered with the pustules of smallpox, was landed on the Mexican coast. From him the disease spread, with such desolation that, within a very short time, according to Robertson, three millions and a half of people were destroyed in that kingdom alone (*see* "Wilson on Skin Diseases"). In all this, nothing is or can be ascribed to epidemic influence.

I most emphatically deny that there is any such disease as *vaccine tuberculosis*, or that either

smallpox or vaccination carry any other disease into the human system. They are essentially skin diseases, whose course is determined in a limited number of days, whereas tuberculosis is known to affect every other tissue in the body, and so far as known, is the result of a hereditary diathesis, is not contagious, cannot be communicated by inoculation, and is a lifelong disease. Vaccination, therefore, never introduces other "terrible diseases into the system," as the Hon. Mr. Taylor *believes*, but may, like scarlatina, measles, or any other cause of reduction of the vital force for a time, afford opportunity for the development of certain other diseases, as eczema and nettle rash, that have been lying dormant in the system and are ready to break out on the slightest provocation; but these instances are comparatively rare, and are of small moment when the almost certain exemption from the infinitely greater evil of smallpox is to be considered.

In regard to *compulsory vaccination*, I do not know where Mr. Taylor gets his figures; but according to the statistics of Hoffmann, "before vaccination was made compulsory the death rate from smallpox in England and Wales was one in 25 nearly, while in Prussia (where it was compulsory), of an average of a million of deaths, only one in 122 was from smallpox;" also that "the soldiers and seamen of England, being better protected, were almost exempt, being only one in 2000 in the army, and even less in the navy."

Of the efficacy of vaccination as a prophylactic I entertain no doubt. I was vaccinated in 1802, with virus obtained from the late Dr. J. Redmond Coxe. I attended the medical lectures in the University of Pennsylvania, in the years 1822–3–4, when smallpox and varioloid prevailed extensively. The students in the class, nearly 500 in number, were, for the most part, revaccinated. There were a few cases of varioloid in the class. A student who had been previously *inoculated* took smallpox and died; the only fatal case. Wishing to test the durability of the remedy I refused to be revaccinated; I attended the clinics at the Pennsylvania Hospital and the Almshouse, which were teeming with smallpox patients, and have since treated the disease in its worst forms, and have as yet escaped infection. On one occasion I attended in a family where out of six children only one escaped, and he was the only one who had been vaccinated. I could multiply instances.

Medicine not being considered an exact science, although by aid of the microscope and vivisection it promises to become so in the near future, it has not as yet satisfactorily explained why vaccination prevents smallpox any more than it is known why the passage of an electric current will reverse the poles of a magnetic needle. For the present the facts are sufficient for all practical purposes. Many persons entertaining views pretty similar to those of the honorable Mr. Taylor, in order to escape the danger of contracting sundry bodily infirmities through the use of humanized virus, resort to *bovine* lymph, regardless of the dangers of rinderpest, murrain, or the acquiring of a gramnivorous appetite.

If smallpox is ever stamped out, it will be through compulsory vaccination aided by the strictest quarantine; but, of course, it must be universal.

Hospital Reports.

UNIVERSITY HOSPITAL.

A Clinical Lecture, delivered

BY WILLIAM PEPPER, M.D.,

Professor of Clinical Medicine in the University of Pennsylvania.

Reported by Wm. H. Morrison, M.D.

The Diagnosis of Simple Catarrhal Fever—Typhoid Fever.

Gentlemen:—I have to-day brought this case before you, and later I propose to show you the Frenchman with typhoid fever, who has presented some very striking changes in his condition since you last saw him.

This girl illustrates, in an excellent way, some of the points of differential diagnosis in regard to the continued fevers, as well as some very interesting and practical points in pathology. I shall briefly give you her history.

She is an Irish girl, 20 years old. Until the 9th of this month she was well. At that time she was suddenly taken sick, with violent headache, pain in the back, fever, delirium, loss of appetite and tenderness over the stomach, but no diarrhœa at that time. She remained in about the same condition until the fifth day of the attack, when she was admitted to the hospital. On admission, her temperature was 102.5°; pulse 116; and respiration 24 in the minute; the pain in the head and back continued; she wandered at times; the tongue was red at the edges; pointed and coated posteriorly with a yellowish-white fur; the bowels were loose (she may have taken purgative medicine before she came here); they were opened twice in twenty-four hours; the stools were light in color; the abdomen was still tender. The next day her condition was about the same. On the succeeding day the bowels had become quiet. She has remained in somewhat the same condition, except that there has been a gradual improvement in her

up to the present time, the morning of the 17th, the eighth day of the attack.

You will at once see a resemblance in this case, in some of its aspects, to a case of typhoid fever, but you will, I have no doubt, at once see marked points of distinction. You will not rarely come across cases where it is difficult to distinguish clearly whether you have a case of simple continued or catarrhal fever, or one of the specific fevers, particularly typhoid. I mean by simple continued fever, a febrile affection which is directly associated with a catarrhal inflammation of the mucous lining, chiefly of the stomach and bowels. We may, of course, have catarrh of the respiratory tract, and with it fever; but these cases are characterized by such marked physical signs, that they never give rise to any confusion; but the cases in which there is catarrhal inflammation of the mucous lining of the stomach and bowels, with febrile action, do often resemble typhoid fever of a mild type, and are frequently taken for cases of that disease.

Let us then consider in what particular they resemble each other, and in what particular they differ.

We find that, as a rule, catarrhal fever has a shorter duration, anywhere from nine to fifteen days, or even in some cases to twenty days. Secondly, the fever is, as a rule, not so high as in typhoid fever. There is the same fluctuation between the morning and the evening temperature, but as a rule, the evening elevation is not so high as in typhoid; nor does the temperature show that peculiar tendency to vary in successive weeks of the disease. In typhoid fever we have a lesion which occurs in successive crops; the follicles enlarge, ulcerate, and then slough; but they do not all do this at the same time. First one group enlarges, reaches maturity, ulcerates, and sloughs, then another group passes through the same change. We have thus a peculiar course of the temperature in each week of typhoid fever. We find, in the same way, that the other symptoms, particularly the eruption, follow this same fluctuating course.

Again, although in simple continued fever there is a continued fever with marked daily variations, the disease is wanting in some of the characteristic symptoms of typhoid fever. There may be in catarrhal fever moderate distention of the abdomen; there is usually a tendency to looseness of the bowels; the stools may be of a yellow color, resembling closely the stools of typhoid fever, so much so that it is often impossible to distinguish between the two; but the degree of distention of the abdomen is rarely as great as in typhoid. The coats of the bowel are not so much involved; there is not the same degree of paralysis of the muscular coat; there is, therefore, not so much distention of the bowel.

In catarrhal fever the diarrhœa is rarely so severe and uncontrollable as in typhoid. There is scarcely ever any hemorrhage, and if any, it is very trifling.

Again, there is an absence of any characteristic eruption in this disease. In typhoid fever, about the seventh day there appear, on the abdomen for the most part, the peculiar, little, oval, rose-colored spots. In catarrhal fever they do not appear.

Bleeding of the nose, which occurs frequently in typhoid fever, rarely occurs in catarrhal fever. This is a much less characteristic symptom of typhoid fever than some that I have mentioned and some that I shall mention.

Bronchial irritation we may of course have, because the catarrhal trouble which affects the stomach and bowels may also affect the respiratory mucous membrane. The presence, therefore, of a loose cough, with evidence of bronchial irritation, will not, in itself, enable us to distinguish, with any degree of certainty, between the two diseases.

The nervous symptoms in simple catarrhal fever are rarely grave. In an average case of typhoid fever the mind is dull, there is marked hebetude; questions are answered slowly; as the disease goes on there is apt to be delirium. As the case goes on the patient may pass into a state of marked delirium, or, on the other hand, into a state of deep stupor. These symptoms are common in marked cases of typhoid fever. In catarrhal fever the patient may be a little dull, reluctant to talk, and will lie quietly, as long as he is left alone; or there may be a little tendency to wander; but there is rarely the marked nervous symptoms that I have described as occurring in typhoid. In very nervous subjects, in those whose nervous system is easily thrown off its balance, catarrhal fever may cause marked delirium.

You see, therefore, that there are between the two diseases points of distinction and points of resemblance. The differences being to a considerable extent merely those of degree; and were this all you can readily see how difficult it would be to distinguish between a marked catarrhal fever and a mild typhoid fever.

In addition to these differences of degree, there are actual and specific differences, namely, the duration of the disease, the peculiar fluctuations of the fever and the absence of special eruption. Upon these latter points we often have to base our diagnosis, and not rarely you will have to hold your judgment in abeyance for a certain length of time before making the diagnosis.

There are actual differences in the cause and in the mode of onset. Typhoid fever we recognize as depending upon the introduction into the system of some form of poison, from some source, by some route, probably taken in by drinking water, or inhaled into the lungs, and which, entering the system, sets on foot changes in the blood, especially lesions in the glands of the intestine, going on to ulceration, and peculiar changes in the spleen. The development of typhoid fever is slow. The poison gains access to the system; there is a period of incubation, and then the gradual development of symptoms.

Catarrhal fever has quite a different beginning. In the majority of cases the symptoms develop rapidly. In this case the patient speaks of having been well until the 9th of the month. She was then suddenly taken sick, with headache, pain in the back, fever and delirium.

If we knew, or could study the circumstances under which the disease arose, we might receive some light as to the nature of the case. If we found that this woman had been exposed to bad hygienic conditions, if the air she breathed had

been contaminated by the emanations from drains or sewers, if she had been subject to depressing causes, which would render her more susceptible to the typhoid poison, we might suspect that she was suffering from typhoid fever. If, on the other hand, we had found this trouble coming on after exposure to changes of temperature, or draughts, or getting the body chilled, or after some acute indigestion, with at the same time exposure, we would have reason to think that there was no septic poisoning, but that it was an ordinary catarrhal attack.

In this case, everything, the onset and the character of the symptoms, appears to indicate that this is a case of simple catarrhal fever.

This is the ninth day of the attack, and just the time, if it were typhoid fever, for the eruption to appear; the other symptoms should be developing, and the fever rising; but instead of this, we find that the pulse is 84, and the temperature 99°. In typhoid fever it is rare to have the temperature go down to 99° until the morbid process has run its course. When the lesions have terminated, the ulcers cleaned, and the irritation subsided, the fever will fall, and not till then.

We find to-day that the tongue is cleaning. It is moist. It is a little red and the papillæ are enlarged. There is a little white coat on the back. It still evidences distinct irritation of the gastro-intestinal mucous membrane; a tongue of that kind on the ninth day of typhoid fever would be unusually favorable. There has been no disposition to diarrhœa for several days. She has no appetite. I now examine the abdomen, to determine the presence or absence of pain. Even when you are not sure that the case is typhoid fever, I would beg of you not to knead and press the abdomen too hard. Do not poke the tips of your fingers into the right iliac fossa, to try to develop pain or gurgling. You are poking precious and tender tissues, and you had better do it very gently. It does you no good to develop pain, and it may do your patient a vast deal of harm. It does you very little, if any good, to develop gurgling. It simply indicates that there is air and liquid in the bowel, and this condition may occur in diseases other than typhoid fever. There seems to be a little hyperæsthesia over the bladder. There is no distention of the abdomen. There is not a trace of eruption. There are a few little brown freckles. There are a few sudamina, *i. e.*, little drops of sweat caught under the epidermis. They have no special value whatever.

It would seem, therefore, that the patient has simple continued fever, of a catarrhal origin, without special typhoid poison associated.

Sometimes you will find that these cases will run on for twenty days. In such cases you will readily understand how difficult it would be to state positively that there is no typhoid fever present. You should be very cautious how you make such a statement, for if you say there is no typhoid fever present, it will not be deemed necessary to adopt the same careful treatment as in that disease, but if it should be typhoid fever, your want of care may cause the death of the patient, from hemorrhage or perforation. If you err, let it be on the side of safety. If you are not perfectly sure that it is a case of catarrhal irritation, with continued fever, call it mild typhoid, treat it as such, and insist upon the patient remaining in bed until the period that typhoid fever requires has elapsed. Keep the patient in bed for thirty days, so as to diminish the possibility of the rupture of a latent ulcer, causing the patient's death.

As to the pathology. It is very interesting to consider how long this fever can be kept up without, as far as we know, any special poison in the blood. It has become too much the custom, when a patient has fever which is not readily accounted for, to suspect blood poisoning. Blood poisoning is one of the fashionable topics of the present day. It has been taken up, not only by the profession, to apply to many cases of obscure disease (for if you say a patient has blood poisoning everybody is satisfied), but it has also been taken up by sanitary engineers, plumbers, and the people at large. Constantly, when attending a case where the febrile action is at all obstinate, you will be asked, "Doctor, is there not danger of blood poisoning." Local lesions have caused fever from the beginning of the world, and will do so as long as the body retains its present construction. Before you bring into the explanation of a case such a mysterious agent as blood poisoning, be sure that there is no local lesion present sufficient to explain all the symptoms. Do not neglect to make a minute physical examination of every organ.

As we go on in our clinical studies, I shall be obliged to return time and again to this topic, that local diseases excite general disturbance, that they implicate the whole system, and that, if neglected, they may give rise to the gravest general disease.

It is excessively interesting to see how a simple local lesion of a mucous membrane, without, as far as we know, any septic element, may keep up a continued fever of this character for so many days. "Yes," you may say, "but do not the secretions undergo change and become poisonous, and is not some septic matter absorbed from the bowel which has an influence on this fever?" I have no doubt but that there may be, in certain cases, such an occurrence. I am inclined to think that a patient who has catarrhal fever, whose intestines are filled with matters ready to undergo fermentation and putrefaction on the slightest change, may have admitted to the system a minute amount of the typhoid germ—the typhoid ferment—possibly so small an amount that, if the system were in perfect health, it would be cast off and cause no trouble, but finding a suitable nidus, it develops and passes into the system, giving rise to a typical attack of typhoid fever. The typhoid fever poison must be very widely distributed. I fancy that through the system of nearly every one of us some of it has passed at some time; but it will undoubtedly act very differently and will produce very different results, according to the state of the bowel and the state of the system. An amount which would be eliminated readily when the system was in perfect health, will, if it finds the bowels containing matter prone to decomposition, and forming a suitable pabulum for it, go on developing and give rise to genuine typhoid fever. I

have frequently seen cases apparently of simple catarrhal fever occurring under unfavorable circumstances run into typhoid fever. Though I do not intend to assert that simple catarrhal fever can turn into typhoid fever from the absorption of ordinary putrefactive material from the bowel. As far as we know, the special typhoid poison must be admitted to the system and gain entrance to the blood.

But in this case, and in many of these cases, we have no right to suspect the least absorption, either from within or without. The fever is the result of irritation of the epithelial layers of the mucous membrane and of the terminal nerve fibres, and through these fibres, of the heat producing centres of the higher part of the nervous system. It is the same sort of fever that we have produced by local lesions everywhere.

If this is the case, you will see at once how enormously important is the treatment of these sorts of cases; and not only that, but you will begin to comprehend how very important, even in cases where there is blood poisoning, and also a local lesion, is the treatment of that local lesion. In typhoid fever, where there is a local lesion as well as blood poisoning, it is very important to address remedies to the cure of that lesion. Here we have a much simpler matter, for if we remove the irritation of the bowel the symptoms will at once improve.

Let me at the commencement of our studies speak against the use of purgatives at the beginning of febrile affections. What indication is there for any purgative dose at all? The chances are that the intestine is in a state of acute congestion, and you give a dose which if given to a man in perfect health would set up a degree of irritation that would make him miserable and sick for several days. The reply is, "I gave it to remove the morbid secretions, to carry off the effete matters." Very well; if you were dealing with a rubber hose, and could be certain that when you removed the obstruction it would remain out, there would be some reason in the treatment; but how do you know that while you remove the morbid secretions from one end of the bowel they will not collect at the other? The purgative you give may only increase the gastritis and duodenitis, and the morbid secretions will be thrown out more abundantly.

Be sure, therefore, that you have such an obstruction—such an accumulation as absolutely requires removal—and then graduate the dose to the condition of the stomach and to the irritation of the small intestine. I should treat such a patient expectantly for a short time. Then if I were satisfied, from the moderate distention of the bowel and the passage of one or two stools of an unhealthy character, that the inflammation of the mucous membrane was of an unhealthy grade, I should use the mildest sort of a purgative. Nothing that would nauseate should be given. What we desire is a substance that is at the same time a laxative and a sedative. Calomel in small quantities combines both of these qualities. I often use the following formula:—

℞. Calomel, gr. ij
Subnitrate of bismuth, ʒ ss ad ʒ j
or
Bicarbonate of soda, ʒ ss ad ʒ j

This I divide into twelve powders, and give one every two hours until the bowels are moved or all the powders have been taken. If there is much irritation of the stomach I use bismuth, but if the stomach is quiet, I use soda. If you produce one comfortable stool, you have done enough, and there is no longer any justification or necessity for purgatives. If, after using a dozen of these powders no stool is produced I should stop them and would use the ordinary liquid citrate of magnesia in very small doses. To an adult I should give f ʒ ij every two hours until a stool was produced; or, I should give one-third or one half of a seidlitz powder.

In all of this class of cases, you will find that laxatives act with unusual force. After this woman came in she had two or three loose stools, but no sooner was she put upon a soothing treatment and simple diet, than the bowels became quiet and remained quiet, and on the ninth day the fever was gone.

You have a patient who is about to have typhoid fever, and you give him an ounce of oil, or a couple of compound rhubarb or compound cathartic pills, and that man has eight or ten loose stools, and you so far aggravate the disease of the bowel, that you may have converted what would have been a mild case into a severe one.

You have a patient with catarrhal irritation, and you give him strong purgative doses; you fix that inflammation in his bowels for fourteen or fifteen days—five or six days longer than it need have been, because you aggravate the lesion in its very inception. If you had a patient with a simple fracture, and the indication was to secure primary union, and you took hold of the bones and produced active crepitus for twenty minutes, the treatment would be about as philosophical as it is to give active purgatives in these catarrhal conditions. I earnestly hope, as one result of our studies, that we shall come to a definite conclusion not to use purgatives in acute diseases, unless they are absolutely called for, and that when they are necessary, we shall give some mild, sedative laxative, in minute doses, oft repeated.

There can be no question as to the serious harm that has resulted from the excessive use of purgatives in acute disease. The success of homœopathy has resulted largely from this practice on the part of physicians, and there is nothing which continues to do more harm than an adherence to it.

Relapse in Typhoid Fever.

I want to again call your attention to this typhoid fever case. He has had a relapse. His temperature when you saw him last, the 13th, was only 100.4°; his pulse rate was 88 and respirations 20. On the morning of the 14th he was just as well, but in the afternoon his pulse began to go up; the temperature jumped at once to 104°; the morning of the 15th it was 102°, in the evening 104°; morning of the 16th 102°; last night 104°; and this morning it is again 102°. After there had been a great reduction of the morbid process, there is a very abrupt and severe renewal of it. Of course, this is associated with a renewal of one of two things; either more poison

has entered his blood, or else there is an outbreak of some local irritation.

What symptoms has he presented? He became delirious, but his delirium was of a very mild type until last night, when, I am sorry to say, he quietly got out of bed and walked some distance, but he does not seem to have hurt himself. His tongue is moist and slightly coated. Examining his chest, I find the heart sounds normal. He has not had much cough. The chest is resonant throughout. There are a few bronchial râles. There is no reason to suspect any definite pulmonary trouble. There is merely congestion and bronchial irritation. He has had two small attacks of epistaxis. The bowels are quiet. We must, therefore, attribute this local outbreak and sudden rise in temperature to the beginning of disease in another group of follicies and glands of the bowel. I have no doubt that the epistaxis was due to enlargement and ulceration of follicles in the nose.

This man is in for another little siege. A fresh group of glands have become inflamed, and this must run its course. We have not nearly reached the point where we can relax the rigidity of our treatment in this case. More than this, knowing that the separation of the sloughs from a former group of ulcers was followed by a hemorrhage of almost a pint, we have great reason to fear another sudden burst of hemorrhage, and this, in his present weak condition, would, of course, be more serious.

Under these circumstances, I think it proper to add stimulus in moderate amount to the treatment of this man. I want to call attention to the gratifying fact, that while the temperature has gone up so high the pulse rate has remained excellent; it has not reached 96 per minute since the evening of the 14th. I told you when we had this man before us last, that he had a markedly dicrotic pulse; to-day it is less so. I shall, therefore, give stimulus in only small amounts. We shall give him f℥ iij of sherry wine every twenty-four hours, in the form of wine whey, made into about twelve or fifteen ounces of whey. We shall give him a wineglassful, alternately with his milk. The pills of nitrate of silver and opium will be continued, but I shall increase the frequency of administration, hoping to favorably influence the diseased glands.

His temperature has now reached a point where it may be questionable whether it is not right that something more positive should be done for its reduction. It has reached a point where a good many authors would say that the patient should be put in a cold bath, and kept there until the temperature goes down. I never for one moment assent to any such practice. I should advise sponging with tepid water at a temperature of 72° and containing a little vinegar and carbolic acid, or a little alcohol and carbolic acid. That will reduce the temperature. I do not care about bringing it down too rapidly. It is not associated with grave nervous and cardiac symptoms. It is due, I think, to the local trouble. If his temperature remained persistently at 104°, I should certainly adopt stronger measures for its reduction; but as long as there is this marked fall of two degrees in the temperature every day, I do not think it necessary to resort to a treatment so disturbing as cold water bathing.

I hope that we may be able to avert the great danger here, which is hemorrhage.

Editorial Department.

Periscope.

The Victims of the Ring Theatre, in Vienna.

The *Allgemeine Medicinische Central-Zeitung* publishes Professor Hoffmann's report on the methods adopted for the identification of the victims of this great fire. Some of his observations will no doubt be of interest to our readers. In this report he says: Over two hundred and fifty bodies were examined, and a great many among them identified. In many cases, owing to almost complete carbonization, sex could only be ascertained by internal examination; the presence or absence of the uterus and ovaries being our only guidance. Age could likewise only be approximated, yet was of importance in establishing identity. Simple inspection often revealed strange transformations: age bore the semblance of youth, and reciprocally. In such cases we had to rely on the indications furnished by the humerus, with regard to complete union between the diaphysis and epiphysis. As you are aware, this only becomes perfect after the twenty-fourth year. In like manner, the ossification of the ribs and larynx served as indices; for you remember, with this last it commences at from thirty to thirty-five, and is complete by about the fortieth year. The condition of the ovaries supplied valuable information. In girls and young women they were quite smooth, but in older subjects they had that well-known uneven appearance which they assume after numerous ovulations.

The hair and beard on a great many bodies had become of a uniform black color, and only by careful cleansing were they restored to their natural hue.

The color of the eyes was not easily detected, the cornea having a milky and cooked-like appearance. In some cases an opalescence of the iris led us to believe the eyes were blue.

The teeth were calcined, and so brittle that they crumbled under the least touch. They looked as if carious, and it was often very difficult to judge of age from the amount of wear they presented. We found great quantities of artificial teeth.

When the hands were under inspection the condition of the epidermis and finger nails supplied indications. In proof of this, let me tell you an episode. An aged couple and their son were in search of a young woman, the wife and daughter. As an indication, they said her finger nails were red, from nursing. A body was found with breasts and nails answering this description, but around the neck was an "amulet" and cross, and the sorrowing family were Jews. Later, however, another body was discovered, and fully identified by them.

Under the head of "particular marks," we noticed a cicatrix from coxalgia, and a cyst at the root of a right index finger. Of course, we found many hernias and hernial bandages.

In all, we ascertained six cases of pregnancy, of which one was in the sixth month, two in the second, and two in the third. In one of these last, all that remained was the neck, the uterus and ovaries having been carbonized. The breasts contained some colostrum. This body was identified.

Surfaces still covered by portions of clothing were found well preserved, even upon bodies otherwise greatly carbonized.

As may well be imagined, we met with burns of every degree, but generally speaking, only very few bodies bore the appearance of having been burned while alive; external erythema and phlyctænæ being quite rare. It is probable that the majority of the victims in this terrible catastrophe were first smothered by smoke, and only burned while in asphyxia, in agony, or after death.

In some cases skulls had been carbonized and split open by the heat, exposing the calcined brains; and many abdomens were found gaping open, their shriveled contents having remained undisturbed.

Remarkable Case of Periodical Peeling of the Cuticle.

A. Chevallier Preston, M.R.C.S., reports the following singular case in the *Lancet*:—

M. J., aged sixty-seven, a fairly nourished woman, of fair complexion, came under my care in July last. The complaint from which she was then suffering was of old standing; but she stated that she had, with this exception, enjoyed good health from childhood. The only serious illness had been smallpox at the age of two years, and she has a large bronchocele, which developed at the age of puberty. Subjoined is the history she gave me of her present illness, which is, according to her statement, identical with what she has suffered at intervals since childhood. At intervals of a month or six weeks the following occurrences manifest themselves: After a day or two of slight feeling of malaise, the skin of every part of the body comes away in "casts," and the cuticle, which separates from the extremities, does so in one entire and sometimes unbroken piece, resembling a "glove" or "stocking." The new skin beneath has the appearance of ordinary skin after desquamation, and "lasts her," to use her own expression, for several weeks, when it begins to get irritable and inflamed. She has lately been going through one of these "changes," and I have had the opportunity of watching her daily. The first time I saw her, a week before the final "casting off," she was feeling unwell, and told me she was expecting a change of skin, and begged me to give her no medicine, as she had found that certain medicines that were prescribed for her at this stage made the skin fall off more thickly, and caused her pain, by leaving only a thin covering all over the body; at least, this was her experience. She was then suffering from slight rheumatic pains in her left elbow, for which I prescribed an anodyne liniment, which relieved her; but she was not able to continue it, as the peeling commenced where the liniment was applied, and the new skin was too tender to bear it. She was kept in bed, being cold weather, and in three days the desquamation became general, the skin of her nose, ears and hands coming off as complete casts. The desquamated skin is of the thickness of the ordinary cuticle, and in places it is as tough as the lining of a hen's egg. I have preserved the covering of the hands and feet in spirit. Now that the skin has come off she expresses herself as "quite well" again, and is able to get about, feeling far more comfortable in the new skin than in the old one. I questioned her closely as to her previous history, and could gather nothing from it to throw any light on the cause of this extraordinary phenomenon. She has had a large family, and has healthy children; none of them having any appearance of her idiosyncrasy. The state of her menstrual functions was always good up to the change of life, seventeen years ago; and she did not associate this occurrence with the menstrual flow at any time, unless by accident. She states that she first remembers an attack of this kind at the age of seven years, and she was afterwards told by a medical man that it was from "catching cold after the smallpox." The phenomena of this disease are so unfamiliar to me, that I shall welcome any hints as to diagnosis, etiology and treatment of the case.

Inoculation for Pannus.

In the *American Practitioner*, Dr. W. Cheatham, after describing the different varieties, and discussing the etiology of pannus, says, "Many remedies have been advised. Argenti nit., cupri sulph., acid tannic., and poultices, besides operative procedures, are a few only of the corrective measures recommended. These may give some relief in the milder cases, but where you have a true pannus crassus to deal with, I do not believe that anything will yield the result that inoculation with blennorrhœal matter will." He then relates the following case:—

"A farmer, aged forty, general health not very good, came to see me in September last, about his eyes. I found him with one of the worst cases of pannus I had ever seen. The corneæ were so thoroughly vascular that the pupils could scarcely be seen. He was unable to see more than to tell daylight from darkness, or white bodies. The palpebral conjunctivæ were thickened. After some weeks' treatment of lid they were greatly changed for the better. No treat-

ment to corneæ improved them any. He was also on general treatment at the same time.

"Finally, giving up all hopes of relief from the usual course, I told him frankly there was but one thing else I could advise with any prospect of relief. I stated the case to him plainly, telling him I would inoculate his eyes with pure gonorrhœal matter; stated the pain he would suffer, the chances of ulceration and atrophy of the globe. I everted both upper lids and applied it thoroughly to them. In about three days the lids were swollen and œdematous, with some discharge from eyes. In a week the disease was well developed. I did not undertake to control it for about ten days. Then I used iced cloths locally, with a collyrium of tannic acid grs. xx to aqua dest. ℥ j, dropped into eyes three or four times a day. In using this I usually direct that the eyes be thoroughly cleansed with cool water first; then the medicine dropped in; in a few minutes the eyes cleansed again, and the application repeated. Between these applications the eyes were thoroughly cleansed every hour or two. This prevented any increase of trouble and appeared to decrease amount of discharge some. After using this for ten days I ordered a collyrium of argent. nit. gr. j to aquæ dest. ℥ j to be dropped into the eyes every two hours; the iced cloths to be continued. Under this line of treatment discharge almost stopped in a week. I sent him to the country to remain three weeks. He returned a short time ago revealing remarkable improvement. The corneæ were very clear. Vision equal to $\frac{10}{200}$. He said he had no difficulty in going alone anywhere he wished. I should have said while in the country he continued the argent. nit. drops, and will add that there is not now nor will there be any staining of tissues from the use of the nitrate of silver. Five minutes after dropping the medicine in he usually bathed the eyes well in a weak solution of salt water. His sight is still improving."

In conclusion, he believes this to be the *only remedy* for pannus crassus; gonorrhœal matter, or the discharge from purulent ophthalmia or from ophthalmia neonatorum can be used. Whatever the source, be sure it is pure.

Surgical Instruments in the Time of Galen, A. D. 259--268.

We make the following extracts from an interesting article published by Dr. Mook, in *L'Union Médicale*, on a number of surgical instruments belonging to the Third century, and found in excavations made in the Quartier St. Marcel, Paris, in October, 1880. All these articles were contained in a round bronze vessel, in which two buckles and seventy-five coins were found. The cutting instruments are represented by two double-edged knives with blades 2.5 inches long, and light hexagonal handles of same length, the whole made out of one piece. Another instrument of similar form, but with blunt edges, must have served the purpose of a spatula. Still another, may have been used as a spatula, but it differs greatly from the above; its blade is 0.40 inch wide by 2 inches long, with a thin, round handle 0.04 inch thick, by 2.80 inches long, having at its end an olive-shaped ball 0.40 inch by 0.16 inch thick. The use of this is not very clear, it may have served as a probe, or even as a small cautery. Forceps are well represented. They are cut from a single piece of bronze, are beautifully finished, and have lost nothing of their elasticity. Two are pointed, and it would seem, were intended for the extraction of foreign substances, or fragments of bone. Two others, respectively 5.6 and 4.8 inches long, have flat jaws, curved inwardly toward each other, and 0.20 inch wide. A number of serrated forceps affect different forms. Some resemble the two preceding ones, while others have one of their jaws curved at a sharp angle from the axis of the forceps; the serrations correspond exactly, and are models of fine workmanship. An instrument having the form of a small spatula 1.20 inches wide, is adapted to a tubular handle 7.20 inches long, and was evidently used as an insufflator, for the purpose of introducing remedial agents into natural cavities.

The use and preparation of ointments must have held an important place in the medical practice of those days. Five gilt bronze tubes, each six inches long, were used for holding ointments, one still contains some, which has been preserved by the oxide of copper covering its surface.

We must mention a long-handled, half spherical capsule 1.6 inches in diameter, having a beak for pouring out liquids, and used, no doubt, for warming ointments.

We must also notice an instrument so different from any now in use that it is hard to guess its purpose. It is eight inches long, formed of two branches, articulated like scissors, and ending in a curved surface forming the fourth part of the circumference of an ovoid. When closed, this forms a space of about 1.60 of an inch; the handles are ornate, and the articulation nearer to the serrated end. This instrument, when closed, can be safely introduced in cavities, and wounds, and when open, it can grasp bodies, or resect tissues as an *écraseur;* at the same time it may be used as a hæmostat, and for removing detached fragments lodged in its concave surface.

There is also a flat stone, probably used for spreading ointment, and on which to sharpen the different instruments. All these instruments are made of bronze, containing some silver, a fact which has, no doubt, contributed to their excellent preservation.

The Alkaloids Derived from Protein Compounds.

The *Revue Médicale*, in noticing a paper recently published by A. Gautier on the above subject, remarks that in 1872, while investigating the reciprocal transformations of albuminoids, Gautier discovered that when fibrin from blood is allowed to putrefy under water, it becomes liquid, yields albumen, butyric and acetic acids, leucin, tyrosin, and leucein in large quantities, and besides these small quantities of fixed and volatile alkaloids.

Selmi also called attention to the fact that in the cadavers of persons who have died a natural death, the stomachs are found to contain compound substances showing the same reactions as

certain vegetable alkaloids, without, however, preserving their toxic qualities. These substances are not creatin, creatinin, or tyrosin, but are similar to those found in the alcohol used for preserving anatomical specimens. Selmi gave those alkaloids the name of ptomaïns, without, however, indicating how they were formed.

This was reviving Panum's sepoin, that fixed poison of purulent sores, comparable in its activity to the venom of serpents, or to curara or the vegetable alkaloids.

Now, according to Gautier, among the fixed and volatile alkaloids of cadaveric origin, some are inactive, while others, especially the fixed bases, are very venomous. The ptomaïns usually found in the visceræ of recently deceased individuals, generally show different reactions from those produced at a later period.

Among the fixed or volatile bases that are derived from cadaveric substances, there are several which can very readily be mistaken for some of the toxic vegetable alkalies; it is, therefore, highly important to distinguish between them, so as to avoid possible judicial errors, and besides prove the non-identity of those bodies with any of the vegetable alkaloids thus far known. We cannot give here all the details adduced by the author; he thus concludes: Unless in cases where morphine, apomorphine, liquid hyoscyamin, and muscarin are present, the instantaneous production of Prussian blue, in the neutral salt of an alkaloid derived from cadaveric substances, by the addition, first of ferric cyanide of potassium, then of dilute perchloride of iron, is an indication that, very probably, the alkaloid present is one of the ptomaïns.

Alkaloidal substances are likewise formed in the ordinary process of tissue life, while the economy is in its normal state. They occur in variable proportions in bile, urine, and muscular fluid. They are a necessary component of certain very active normal secretions, such as venoms, which derive some of their properties from them. They apparently develop in considerable quantities under certain pathological circumstances, and are one of the causes of those functional troubles which follow in many diseases, especially when there is an exaggerated tendency to disassimilation, and above all, when the elimination of urinary products is obstructed. If our urine in its normal condition contains toxic substances analogous to those found in venom, it was natural to suppose that saliva would also contain them, since it is produced by glands similar to those supplying it in venomous snakes. It has, in fact, been found that human saliva really contains one or more of those substances, and although it differs in activity according to the time when secreted, it has proven itself venomous, at least for birds. It would therefore appear that the venom of snakes differs from human saliva, more in intensity of effect than in actual composition.

A New Solvent for Diphtheritic Membrane.

Dr. W. Hale White thus writes to the *Lancet*: I had been testing for some time the various solvents for diphtheritic membrane, such as lactic acid, etc., recommended in the text-books, and finding them all useless in practice I began to look about for new ones. I accordingly procured a supply of acid glycerine of pepsin, in readiness for any case that might occur. The following are brief notes of the first case that I encountered:

Louisa D., aged two years and a half, was first seen on the morning of July 5th, 1881. There was extreme lividity, sucking in, and dyspnœa. I performed tracheotomy immediately (high operation). Instant relief was afforded, and the back of the trachea was inspected, but no membrane was seen. Accordingly a silver tube was put in, and the child did well till the evening of the 7th, when a small piece of membrane was coughed up. I therefore sprayed the throat with a Siegle's spray, putting half an ounce of the glycerine of pepsin in the glass bottle. This was done every two hours. On the morning of the 8th, as very little spray could be got down the tube, I put in Mr. Golding Bird's dilator (which the child continued to wear till the india-rubber tube was put in) and pulled up several pieces of membrane, and continued the spray. This treatment was continued till the evening of the 10th, when, as no membrane had been coughed up for twelve hours, it was left off. It was the opinion of all who saw the pieces coughed up that they had a very soft and gelatinous character, compared to the thick, tough pieces of membrane usually expelled. The case was a very bad one, as is shown by the fact that the quantity of membrane coughed up was very great, by the temperature rising to 104°, the child suffering from vomiting and diarrhœa, and also by its having a severe attack of syncope, from which it was with difficulty roused. An india-rubber tube was introduced five days after the operation. This was soon left off. The child continued to do well; but unfortunately some time after, owing to sudden changes in the weather, it got broncho-pneumonia, and died. At the post-mortem examination there was no evidence whatever to show that the pepsin had any ill effect at all upon the lungs, bronchial tubes, or trachea.

The pepsin was got to its active temperature by being immersed in water at 110° F. before use. I found that the water coming as spray from the boiler was not hot enough to destroy the activity of the pepsin, and as the child had a steam kettle attached to the tent the air in the trachea did not cool it. Of course the steam kettle was removed during the application of the pepsin. I do not think the chief good was done by the action of the pepsin on the large pieces of membrane lining the trachea and larger bronchi, but by its getting thoroughly mixed with the secretions in the small tubes and preventing the formation of membrane there, for it is always found post-mortem that it is the blocking up of these that has killed, provided the child has died simply from the effects of the membrane, without any complication.

It may be mentioned that any one can convince himself of the power of the glycerine of pepsin to dissolve diphtheritic membrane by putting a piece in a test tube, with some of the fluid, and maintaining it at a temperature of from 100–110° F., when it will be seen to be digested rapidly.

This one case he hopes may induce others to try the remedy and furnish their experience. The preparation used by him contained less gly-

cerine than the usual preparation, so that it might more readily pass through the fine tubes of the Siegle spray.

Reviews and Book Notices

NOTES ON CURRENT MEDICAL LITERATURE.

——*The Medical Register* comes to us as the successor of the *American Specialist.* It will be published monthly, with the design of conveying careful criticisms and reviews of new books, with short articles of interest to the profession.

——We have received the twenty-seventh annual report of the Board of Managers of the Howard Hospital and Infirmary for Incurables.

——The Trance State in Inebriety; its Medico-legal Relations, by T. D. Crothers, M.D., Superintendent Walnut Lodge, Hartford, Connecticut, with an Introduction on the Nature and Character of the Trance State, by George M. Beard, M.D., comes to us in the form of an essay, read before the New York Medico-legal Society.

——We have received the second annual report of the Newark Charitable Eye and Ear Infirmary.

——"Observations on the Part the Obstetrical Forceps Plays in the Indication and Prevention of Perineal Lacerations," by Thos. A. Ashby, M.D., comes to us in the form of a reprint from the *Maryland Medical Journal.* Among other conclusions, he states that "the forceps gives the obstetrician perfect control over the head when arrested at the outlet. It may be used advantageously to rotate, extend or retard the movements of the head. By the exercise of this power the head may be made to execute the natural evolutions, and thereby prevent undue injury to the perineum."

——Nervous Shock as a Therapeutical Agent, by Romaine J. Curtiss, M.D., Joliet, Ill., comes to us in the form of a reprint from the St. Louis *Medical and Surgical Journal.* After reciting many illustrative cases, the author expresses his belief that in time it will be recognized that the operations of iridectomy or that for pterygium will have as beneficial an effect upon atrophy of the optic nerve, when they co-exist, as the operation of circumcision has been known to have, when phimosis was co existent with such atrophy.

——*Godey's Lady's Book* for March is full of good things. The steel plate, "The Little Pil ferer," tells its own story, and the colored fashion plate is a gem. The novelette is from the pen of Mrs. M. Sheffey Peters, and is one of the very very best of the series of complete novels given in the Lady's Book. The illustrations, stories, etc., are all first-class.

——We have received the Fifth Annual Report of the Managers of the Sanitarium Association of Philadelphia. This is a most worthy organization, whose purpose it is to take the little children of the poor from their crowded homes to an island in the river, where they may inspire pure air. Contributions can be sent to the treasurer, Dr. Eugene Wiley, 330 Reed St., Phila.

BOOK NOTICES.

Percussion Outlines. By E. G. Cutler, M.D., Assistant in Pathological Anatomy, Harvard Medical School, etc. etc., and G. M. Garland, M.D., Assistant in Clinical Medicine, Harvard Medical School, etc. etc. Boston: Houghton, Mifflin & Co. 1882. pp. 75. Price $1.50.

This is a valuable book. The majority of general practitioners are very inferior in physical diagnosis, and among the reasons for this deficiency stands prominently the fact that they are not familiar with the normal outlines of the various organs; hence they are unable to diagnose accurately by percussion any increase or diminution of size. This book will supply to them this requisite knowledge. It contains eleven illustrations, with explanatory texts.

An Index of Surgery, being a Concise Classification of the Main Facts and Theories of Surgery; for the use of Senior Students and others. By C. B. Keetley, F.R.C.S., Senior Assistant Surgeon to the West London Hospital, etc. pp. 208. Price $1.00. New York: Bermingham & Co. 1882.

This book is a cheap compendium. It contains in a very concise and very stilted manner the prime elements of surgical knowledge; to those for whom the author (in his preface) says he intends it, it may be of some service.

The Sanitary Drainage of Houses and Towns. By George E. Waring, Jr. Second Edition, Revised and Enlarged. pp. 366. Boston: Houghton, Mifflin & Co. 1881.

This is a very valuable work for all classes. Physicians will learn much of value from it, while any layman about building a residence should be advised to consult its pages, in order that he may surround himself with all possible barriers against the introduction of disease. Colonel Waring is thoroughly conversant with his subject, which he has here presented in an attractive and entertaining style.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

THE LEGAL RESPONSIBILITY OF PHYSICIANS

There are very few medical gentlemen who thoroughly realize the importance of some knowledge of the legal responsibilities they may incur in the daily routine of the profession. The *British Medical Journal*, in a recent issue, relates several striking instances of this unsuspected danger. In one case a woman arrested on suspicion of having concealed the birth of a child was examined by the Police Surgeon, to ascertain whether she had recently been confined or not, although she had previously confessed to the birth, and remarked that "*there was no use in examining her.*" She subsequently brought an action for damages against this physician, on the ground of assault; the presiding justice charged the jury in these words: "*Before the examination took place she admitted having had a child; the jury must ask themselves, if that admission was made, why examine further; there was no legal authority whatever to examine this girl.*" After a short absence the jury returned a verdict of one hundred and twenty-five dollars damages for the plaintiff. Some years ago one of our most prominent surgeons in this city was called upon to attend a fracture of the femur. The bone was set and the limb placed in proper position, while careful instructions were given for future management, and absolute rest enjoined. The latter injunction was disobeyed, erysipelas supervened, and shortening of the leg was the result. A suit for damages followed, and while the surgeon was successful, yet he was forced to much undeserved expense and annoyance. Many such cases are reported and could be cited to point our position. We must ever remember that there are many unprincipled persons in the world, and also anxious, eager, vulture-like lawyers, ever ready to whisper into the ear of a willing client, "Sue him for damages; he has money; he has treated you badly, make him pay for it;" and there are many ready and willing to listen to this evil advice. Some of the English courts hold that whenever a physician makes an examination of a woman without having her clearly expressed consent he is guilty of *assault*. She may not *resist*, they claim, because there may be, to her knowledge, some collateral circumstances capable of forcing her acquiescence if she does refuse; though these fears may not be well grounded, yet if they seem to her sufficient to make resistance, to her mind, useless, then such an unwilling examination constitutes assault. They even decided, as far back as 1824, "*That if a medical man unnecessarily strip a female patient, under the pretence that he cannot otherwise judge of her illness, it is an assault*, IF HE HIMSELF TAKES OFF HER CLOTHES.

These decisions are all eminently just and proper. Morality is one of the greatest foundation stones of social prosperity, and must be most zealously guarded. The purity and privacy of the female must be rigidly maintained, if morality is to be encouraged, and this barrier which must ever surround the modesty of women can only be passed when the absolute necessities of deranged health imperatively demand it, and then exposure must only be carried to such a degree as is indispensably necessary. These decisions are based on the *unnecessary* exposure of the female, and are, therefore, just.

Since there are many women who are ready to be induced to bring suit against physicians on the slightest provocation, or even, indeed, with out any just cause at all, it, therefore, will be a wise precaution to bear ever in mind the fact that it has been decided that examination without express consent constitutes assault.

To avoid this pitfall, in which many have and many more will innocently find themselves, unless they heed this caution; it should be made a rule to previously obtain full and free consent from a woman, before a witness or witnesses, ere you undertake an examination, and to surround yourself with the additional safeguard of a witness during the operation. The relations sometimes existing between physician and patient are of an extremely delicate nature, and unless carefully and cautiously conducted, may, in certain instances, redound greatly to the detriment of the physician.

NEW REMEDIES.

In this age of medical progress, new medicinal remedies are being constantly brought before the profession. It is hardly possible to pick up a good medical journal without meeting an account of some hitherto unheard-of drug which is reputed to be of great service in the cure of some particular diseased conditions. In truth, to such an extent has this introduction of new drugs been carried that a journal appears in New York devoted to the chronicling of their advent into public notice. The majority of them are subsequently found to be worthless or even worse, to be really injurious, and are discarded. We have now, and have had, certain good, reliable friends in the materia medica, that have done good service for our fathers and our grandfathers before us, and are still potent for good; such as opium, quinine, digitalis, strychnia and the like. Of the new remedies, with the exception of such really valuable additions as jaborandi and a few others, they live a short time and pass away, forgotten and unmourned, because they possessed merit only in the imagination of their introducers.

We do not desire to advocate *old fogyism*; far from it; we are champions of progressive medicine; but in our science, as well as in every other human pursuit, a rational amount of conservatism is commendable. We must receive with a good many grains of salt the glowing accounts of wonderful cures by unheard of drugs that so often attract in the journals. The majority of medical men are ambitious to discover some new drug more potent than any in use. Hence, when they have used such a remedy in, maybe, but a single case with a successful result, they do not stop to consider whether this patient might not have recovered if let absolutely alone, but straightway rush into print with what they consider a great discovery. Therefore would it be better for physicians to put their trust in well tried remedies, and not to *experiment* with all the new ones they hear about, until their merits have been absolutely proven.

THE DANGERS OF CATHETERISM.

A recently reported case in London, where death occurred as a result of the passage of a catheter, furnishes a lesson for all to remember. It is well known that the introduction of this instrument, even in those of sound and vigorous constitution, has, in not a few cases, been followed by severe rigors and death. Why this should be so is not positively demonstrated, though it would be rational to suppose that its action was due to the impression made on the nervous structure of the sexual organs, and transmitted from there to the vital nervous centres. The nature of the impression we know not; but we do know how to avoid it, and this, after all, is the important practical point. In the London case, after the introduction of the instrument, the man was allowed to walk away and do as he chose. He was soon after taken with severe urethral hemorrhage, which had occurred in a slight degree at the time of the operation, and died in three days. To avoid these accidents, the following rules should invariably be observed, else, if you neglect them, you may, knowingly, be the cause of severe trouble, and maybe death.

1. Place the patient in bed, *between blankets.*
2. Warm the catheter to such a degree (by dip-

ping it in hot water or other means) that it will feel warm, *not hot*, to the back of your hand. 3. Oil it well and introduce *without using the slightest force;* if you do use force, you will be very apt to lacerate the urethra, and possibly to produce a false passage, with all its subsequent horrors. 4. Keep the patient in bed, between the blankets, for at least an hour after all the nervous excitement caused by the operation has subsided, and give him a big dose of quinine, from five to ten grains. By observing these simple precautions you will almost never have any resultant trouble from the passage of a catheter in a healthy man.

VIVISECTION.

In a recent issue, the London *Medical Times and Gazette* criticises an article in the "*Fortnightly Review*," from the pen of the famous Lord Coleridge, against vivisection. There always have and always will be two parties to this question. The subject has been thoroughly discussed, and yet stands to-day as it did in the beginning. What is the use of wasting time and mental force on these elaborate arguments concerning the justice or morality of vivisection. The practical point that must stare in the face of all, whether they favor or oppose it, is, that it will continue to be, in spite of all the anathemas hurled against it. So long as man exists, so long will there be found enthusiastic students of physiology, and by them vivisection *will* be practiced, whether sanctioned or not, since they deem it necessary to the pursuit of their studies. Dissection of dead human bodies is forbidden in some places, with the result that graveyards are robbed and dissection goes on all the same. So with vivisection; it ever will be a fact, openly, or secretly; why, then, waste time writing or talking about it?

Notes and Comments.

Linear Scarifications in Lupus.

This method of treatment, which has received special attention in England, from Balmanno Squire, and in France, from M. Vidal, of the St. Louis Hospital, has already rendered the greatest service in this terrible disease.

This method was first brought forward by Balmanno Squire, but has been much simplified by M. Vidal, who immediately commences the treatment by scarifications without preliminary cauterization with chloride of zinc. M. Vidal uses a very narrow, sharp knife, and makes long, superficial linear incisions over the whole of the affected surface; the incisions are made very close together, and there is considerable effusion of blood, which is, however, very soon arrested.

We have very frequently seen the little operation performed by M. Vidal, and it caused considerable pain at the moment, but not of long duration. The results obtained were often excellent, the cicatrices smooth, without induration, and often hardly perceptible.

In his "Leçons sur le lupus" (Paris, 1879), M. Vidal says that this treatment is excellent in tuberculous lupus and in lupus of mucous surfaces, but does not give as good results in the erythematous form, and particularly in the acneiform variety, of the disease.

This mode of treatment is very much used by the physicians of the St. Louis Hospital, and, according to MM. Lailler and Besnier, gives better results than the modifications of the method proposed by Dubini and Schiff, who recommend introduction of minute quantities of caustic substances into each tubercle by acupuncture.

The Treatment of Whooping Cough.

In the *Allegemeine Med. Cent.-Zeitung*, Dr. Elben says that he has treated whooping cough in a great many ways: he has tried inhalations of tannin, quinine internally, and insufflations of quinine and bicarbonate of soda. He then returned to belladonna, chloral and morphine. In particularly serious cases, in which children were in danger from want of sleep, or owing to vomiting of all food, he has exhibited morphia in bold doses with excellent results; great prudence should of course be observed in using this remedy, and the first symptoms of intoxication must be carefully watched. In some instances bromide of potassium brought relief, but in others it was of no avail.

In three cases Dr. Elben has had occasion to try oxalate of cerium, as recommended by Morgé. To his surprise, he observed such marked progressive improvement, especially in patients suffering from severe attacks of cough and vomiting, that he was induced to suspend all other medication.

In one case he discontinued the cerium and replaced it by morphia; then, finally, all remedies were withheld. In each instance the disease became aggravated, thus warranting the belief that the remedy possessed specific qualities. For children one to seven years old, the dose of powdered oxalate of cerium is from 0.03 to 0.18 grm. (grs. 0.45–2.70), to be taken at one time, and while fasting; later in the evening another similar dose is to be given.

Regeneration of Nerves.

At a recent meeting of the Societé de Biologie (January 21st), M. Brown-Séquard related that, in forcibly elongating the sciatic nerve of a monkey rupture took place. The two ends of the nerve were resected, as far as possible, at the superior and inferior extremities of the wound.

After two months the animal had recovered neither the motility nor sensibility of the muscles under the dependence of the resected nerve; nevertheless, at the autopsy it was found that the nerve had been completely regenerated.

At the superior part of the wound it was continuous with the primitive nerve, and below, without apparent demarcation, with the popliteal branches.

The new nerve, it is true, had not recovered all its connections with the medulla, but its complete reparation in so short a space of time was truly remarkable.

Treatment of Pigmented Spots on the Skin.

Dr. Unna, of Hamburg, recommends the application of simple mercurial plaster, or a plaster made with white precipitate over the colored spots. The skin is first sponged off with Cologne water, or alcohol, and then the plaster in narrow strips is applied, and left on during the night. During the day the following pomade, innocuous to the skin, and much used as a face application by the high society of Vienna, is recommended in the *Berlin. Klin. Wochenschr.*:—

℞.	Bismuth. subnit.,	ʒ iss
	Kaolin,	ʒ iss
	Vaselinæ,	ʒ vj to ʒ iss. M.

This preparation is applied over the affected parts, and, in conjunction with mercurial plaster, effects a rapid cure.

Alveolar Osteo-periostitis in Diabetes.

The *Concours Médical*, for January 14th, 1882, observes: Diabetes was again the subject under discussion at the last sitting of the Academy, and M. Magitot presented the results of his labors on the "Diagnostic Value of Alveolar Periostitis of the Jaws in Diabetes Mellitus." His conclusions were as follows: 1st. An examination of the mouth will invariably furnish a sign for the diagnosis of diabetes mellitus. 2d. This sign is a lesion of the alveolar edge, known under the name of alveolar osteo-periostitis. 3d. This indication of diabetes, which appears in the first stages of the disease, continues throughout its duration, and under certain circumstances, acquires all the importance of a revealing sign. 4th. A simple deviation of the teeth serves as the first indication of diabetes. The second period in the disease, when it has become general, is marked by loosening of the teeth and alveolar catarrh. The third period, that is, when the teeth drop, corresponds with the most advanced stage of the disease. 5th. Beyond this last period, if diabetes continues its evolution, the alveolar edges may become the seat of an osseous reabsorption, either consecutive or not to gingival gangrene.

This last indication is a critical one, and as a rule, closely precedes a fatal termination of diabetes.

Salicylic Cream.

Dr. Matthews Duncan recommends, in the *Lancet*, salicylic cream, prepared by mixing one part of the powdered acid with four or five of glycerine, as a valuable means of keeping sponges, tents, instruments, etc., aseptic in the vagina. It had been suggested to him by Dr. Alexander Ogston, of Aberdeen, and he had used it with success in inducing premature labor, and other operations.

Rheumatism as a Cause of Purulent Conjunctivitis.

Blennorrhagia has been generally considered as a cause of purulent conjunctivitis, but M. Perrin has had occasion to observe a number of cases in which surrounding circumstances precluded the possibility of blennorrhagic infection, but distinctly pointed to rheumatism as the determining cause. The *Concours Médical*, from which we quote, adds, that M. Perrin, in submitting the results of his observations to the Academy, said that rheumatism of itself could determine urethral discharges similar to those from blennorrhagia, and which, in such cases, would be an effect, instead of a cause. He was, therefore, inclined to believe that urethral, ocular, and other symptoms might be superinduced by a rheumatismal condition, developed by various circumstances, and attended by simultaneous, or successive manifestations, but which,

according to individual predisposition, would become localized in the conjunctiva, the urethra, or often in the articular system. In commenting on this question, M. Gosselin remarked that he had never observed anything similar to the facts reported by M. Perrin; he availed himself of the circumstance, however, to call attention to the good effects of dilute alcoholic lotions (dilutions of one-fourth or one-fifth), in the treatment of purulent conjunctivitis.

Local Treatment of Aphthous Stomatitis.

A late issue of the *Therapeutique Contemporaine* gives various formulæ which have proved useful in these obstinate diseases of the mouth.

The antiseptic gargle of the Brompton Hospital has often proven of great service; it consists of—

℞.	Aluminis,	gr. xvj	
	Tr. myrrhæ,	ʒ iss	
	Aquæ destil.,	ʒ iv.	M.

This may be used to touch the aphthæ, and also as a gargle.

If the disease proves obstinate, and no beneficial effect is obtained from the above mixture, Tommasi recommends the following powder:—

℞.	Calomel.,	ʒ ss	
	Amyli pur.,	ʒ ss.	M.

Apply a small quantity of this over the surface of the aphthæ.

Thompson recommends in the same conditions the following composition:—

℞.	Tr. opii,	♏xlv	
	Tr. catechu,	ʒ iiss	
	Ac. sulphuric. dil.,	♏xlv	
	Aq. rosæ, ad	ʒ vss.	M.

The points affected should be touched with a camel-hair pencil saturated with this mixture.

Cause, Nature and Treatment of Yellow Fever.

Dr. Domingos Freire has published (Rio Janeiro, 1881) a monograph bearing the above title.

As he found in the dejections, the saliva, and the blood of yellow fever patients, numbers of microscopic organisms, bacteriæ and cryptococci, he comes to the conclusion that the disease is of an infectious nature. And as the salicylate of soda had been much recommended in analogous affections, such as septicæmia, variola and typhoid fever, he determined to investigate its effects in yellow fever.

He had administered the medicament hypodermically, in doses from 2½ to 22 grains, according to the intensity of the fever, in the first period of the malady. In the second period, the dose should be smaller, as it then acts as an antiseptic; it is of no service in the third period, when black vomiting has commenced.

Dr. Freire reports several cases with favorable issue under this treatment.

Hypertrophy of the Heart in Bright's Disease.

In a recent communication to the Soc. de Biologie, M. Straus gave the results of clinical and experimental researches which he had undertaken, to determine the relations existing between renal lesions, whatever their origin, and cardiac hypertrophy.

The existence of such hypertrophy has been admitted without contest since the days of Bright and Traube, and the troubles in the renal circulation were considered sufficient to explain a compensatory hypertrophy of the left heart. More recently, Gull and Sutton have considered that the elevation in arterial pressure and the consequent cardiac hypertrophy was due to a form of generalized arterio-sclerosis affecting all the peripheric arterioles.

Finally MM. Debove and Letulle have described a species of hypertrophic myocarditis with sclerosis, in Bright's disease, which would seem in some cases to exist primarily and have no connection with atrophy of the kidneys.

M. Straus sought, in his experiments, to provoke nephritis in one kidney of the animal operated upon, examining, a considerable period later, the condition of the heart. He has been preceded in this species of research by Bettmann (1858), by Simon in 1871, and more recently, by Gravitz and Israël; in many cases these observers found cardiac hypertrophy without alteration in the second kidney, while in many of the full grown rabbits the other kidney was enlarged, without cardiac alteration.

M. Straus tied the left ureter in twenty guinea-pigs, and with proper antiseptic precautions recovery was in all cases rapid. On examination, a considerable period later, there was considerable distention of the ureter and the pelvis of the kidney, with atrophy of the organ itself; the weight of the second kidney was twice that of the organ in the normal condition.

There was manifest hypertrophy of the left ventricle of the heart, which was demonstrated by weighing, the organ being about one-fourth heavier than normal.

From these experiments, M. Straus considers it decisively proven, that in Bright's disease the cardiac hypertrophy is due or has its origin in the renal disease, and certain cases observed in practice confirm these results of experimentation.

In two cases of uterine cancer, with compression of the ureter, hypertrophy of the heart supervened, notwithstanding the cachectic state of the patients. The heart weighing in one case ten and in the other eleven ounces.

Chloroform in Cholera.

M. Desprez gives, in the *Bulletin de Thérapeutique*, a treatment recommended by him in 1857, and which was found very useful in the terrible epidemic at Damas, in 1875, and in India, in 1876 and 1877, the following potion constituting the basis of the treatment:—

℞.	Chloroform.,	♏xv
	Alcohol.,	f℥ ij
	Ammoniæ acetat.,	℥ iiss
	Syr. morphiæ chlorhydrat.,	f℥ j–℥ ij
	Aquæ,	f℥ iiiss. M.

Sig.—Teaspoonful every half hour.

Chloroform thus administered seems to act on the spasms and contractions of the stomach.

Liquids introduced in very small quantities are no longer vomited, the medicament favors absorption, and as it is very rapidly eliminated, accumulation of action need not be feared.

Without insisting on the theoretic part of the treatment recommended in M. Despres' memoir, it must be said that M. Follet, who followed out the treatment at Pondicherry, had a mortality of but 29 per cent., while under other methods of treatment the mortality reached as high as 80 per cent.

This method of treatment is applicable only during the first period of cholera; as soon as the period of reaction sets in the employment of stimulants and narcotics is of more doubtful benefit, and treatment should be modified according to the symptoms and indications.

Smallpox Disinfectants.

From the *National Board of Health Bulletin* we note the following methods for smallpox disinfection, ordered by the Illinois State Board of Health. The best disinfectants are, sunlight, fresh air, soap and water, thorough cleanliness, for general use. For special purposes the following are the most efficient, the simplest and the cheapest: 1. *Copperas disinfectant.*—Sulphate of iron (copperas), one and one-half pounds; water, one gallon. A convenient way to prepare this is to suspend a basket containing about sixty pounds of copperas in a barrel of water. The solution should be frequently and liberally used in cellars, privies, water closets, gutters, sewers, cesspools, yards, stables, etc. 2. *Sulphur disinfectant.*—Roll sulphur (brimstone), two pounds, to a room ten feet square, and in the same proportion for larger rooms. When using this, have all windows, fire-places, flues, keyholes, doors, and other openings, securely closed by strips or sheets of paper pasted over them. Then place on the hearth, or stove, or on bricks set in a wash tub containing an inch or so of water, an iron vessel containing live coals, upon which throw the sulphur. All articles that cannot be burned, on account of their value, must be left in the room, while this fumigation must last for twenty-four hours, and may be repeated, when the doors and windows should be left wide open for two or three weeks. 3. *Zinc disinfectant.*—Sulphate of zinc (white vitriol), one and one-half pounds; common salt, three-quarters of a pound; water, six gallons. Into this solution all clothing, blankets, sheets, towels, etc., used about the patient should be dropped immediately after use, and should be well boiled as soon as practicable. Into this solution ought to be dipped the outer wrap of any visitor when he leaves the room. In the event of death, the body should be wrapped in a sheet thoroughly saturated with this solution. 4. *Thymol water.*—Made by adding one teaspoonful of spirits of thymol to a half gallon of water. Spirits of thymol is composed of thymol, one ounce, alcohol, 85 per cent., three ounces. This may be used for the same disinfecting purposes as carbolic acid; it is quite as efficient and has an agreeable odor. When thymol is not available, chloride of zinc solution may be used, half an ounce of chloride of zinc to one gallon of water.

Contagious Pneumonia.

In our issue of February 11th we presented a note on *Contagious Pneumonia*; in continuation, we find some fresh information on the subject from the *Lancet*, in which Dr. Frederick H. Daly says: "I do not mean by *contagious pneumonia*, septic, epidemic pneumonia; I do not mean a blood poisoning from—say an insanitary state of a house or a neighborhood; nor yet do I mean the so-called diphtheritic pneumonia. I desire to discuss whether there exists a variety of pneumonia beginning with rigors and high temperature, and communicable from person to person, as in smallpox, measles, and scarlet fever. He relates several cases to illustrate his argument. He was consulted by a lady about one of five children who had been unwell for several days, with symptoms of fever and incessant cough. A simple diaphoretic mixture was ordered, and in a few days the boy was quite well.

Nine days subsequently he was summoned to see two of the other children, and found them suffering from undoubted pneumonia. These children had been kept in the same room with the first child. Four days after the beginning of their illness (all of which terminated favorably), the mother was taken sick, as well as the youngest child. The mother had a rigor, pulse 126, temperature 104.6°, tongue coated; constantly coughing, but no expectoration, with a violent pain under the left breast. Fine crepitation all over the left chest soon developed and passed rapidly into consolidation, and death ensued. The child taken sick with the mother presented symptoms of pneumonia, but recovered. The grandmother, aged sixty, a remarkably healthy looking woman, came to nurse her daughter. The evening after her daughter's death she was taken suddenly ill, with a well marked rigor, temperature 105.2°. The next morning there was fine crepitation at both bases and great dyspnœa; well-marked pneumonia was diagnosed, and she died six days after her daughter. A careful physical examination of the first case was now made, when the left lung behind gave evidence of recent consolidation, while the history of the child's illness, the sudden improvement from being so ill, the fever, the cough, every symptom, indicated that this was the first case of pneumonia in the house. I do not think there can be any doubt that there had been in this house six cases of pneumonia, two proving fatal, in about a fortnight. There was no reason to suppose that the disease was that variety of pneumonia described as epidemic, and which has been associated with general unsanitary conditions, such as overcrowding and bad ventilation. My cases support the theory that this disease is a specific fever, of which the lung disease is only the local effect. The servants in the house, who were but little in the sick room, escaped the disease." In conclusion, he says, "We know that certain forms of blood-poisoning can produce pneumonia; such as albuminuria, erysipelas, and measles, most probably. I ask is there still another cause of the disease, not generally, if at all, recognized, viz., direct contagion?"

Special Reports.

NO. IV.—ADULTERATIONS.

Adulteration contaminates everything we use. Let an article of food become desirable and valuable, and straightway some rascal is prepared to get up some cheap resemblance to it, by which it can be adulterated, and more money made f the tradesman. Some of these adulterations a positively injurious to health, while the remai der, though harmless, yet are morally wron since we are called upon to pay for what we not receive. When a man buys a pound sugar, he ought justly to receive a pound of suga and it is an act of injustice and a crime if, throug the machinations of man, he receives only thr quarters of a pound of sugar and a quarter of pound of some white earth, which, though harn less, does not possess the properties of suga It is a species of robbery, and ought to be e posed. During the past year much light ha been thrown upon the question, and the crooke ways of those who adulterate have been mad more familiar. Therefore, a report of recent d velopments in this line will be productive of goo by warning you and showing you how to dete adulterated articles. Legislation can do muc to effect a reform, but the public can do sti more. If every one knew how and would te every article they purchased, the tradesme would be afraid to sell adulterated goods, whe they knew that detection, loss of custom, gossi and subsequent failure would be the result. To much attention cannot be directed to this point since in many cases it will be the unsuspect ed cause of undermining the constitution an producing a condition of chronic ill health In this journal, last September, it was state that a municipal laboratory had been recentl opened in Paris, where anybody can hav analyzed, for a small fee, samples of food drinks, or anything connected with hygiene Several samples of butter were found to b made with oil or suet, which were easily sepa rated. This brings up the much mooted subjec of oleomargarine. It seems to be the presen belief of those most capable of judging and ex pressing an opinion, that while oleomargarine is not exactly identical in composition with goo butter, and does not contain the same element of nutrition, yet its use is admissible, since it i not absolutely injurious. Dr. Cutter, of New York, in the course of an article on butter, says "To conclude, butter is good nerve food; oleomargarine honestly made may not be unhealthy, but it cannot, in our opinion, take the place o the normal products of the protoplasm of the mammary gland." The *Pacific Medical and Surgical Journal*, says, "From the first we have regarded this product (oleomargarine), as a contribution from clinical science to domestic economy, in the interests of the human family. Were it not for the motives of trade, and the fears of

ompetition on the part of the dairymen, there ould have been but little question on the sub- ct. The case is one of selfishness and pre- dice, arrayed against the interests of the eople, the poorer classes more particularly. rofessor CHANDLER, State Chemist of New ork, recently reported that it was superior to w grades of dairy butter; that there is nothing jectionable in the material, and that he sees) necessity for legislation concerning its use." n the other hand, Prof. RICHE, read the official port of a commission appointed to investigate e propriety of substituting artificial for natural tter, in the French insane asylums, before the cadémie de Médecine, in which the following nclusions appeared:—

1st. It appears, from three years' experience St. Anne, at Vaucluse, and at Ville Evrard, at the employés and some patients could not dure this alteration in the usual fare.

2d. The alimentation, and, therefore, the pre- rvation of health of extra-sensitive and very licate patients would be unfavorably affected. any case it would be a serious change in the gime of those whose constitutions were already rn out.

3d. Oleomargarine is a manufactured product, d so open to fraud; it is well known that vege- ble oils are used. Moreover, experience shows at some time is required for a stomach ac- stomed to food cooked in fat to become ha- tuated to that dressed in oil, and physiological searches prove that vegetable oils are less sily digested than animal fat.

4th. Fatty substances are only absorbed into e system in the state of emulsion. Chemical actice and culinary experience having shown at oleomargarine does not emulsionize so adily as butter, and that the emulsion of the rmer is not as stable as that of the latter, it is asonable to conclude that oleomargarine is not easily assimilated as butter.

It is therefore proposed that the commission ould reply to the Minister that the Academy nsidered the proposed substitution inexpedient, d this proposition being put to the vote, was animously approved.

Last year the Public Health Committee, of ew York took up the matter, and investigated thoroughly. After taking into consideration e French observations, noted above, it was nd that there is a very great mass of testimony m various experts in favor of the article in estion. Sanitarians, chemists and physiolo- ts all endorse it as a useful, harmless and latable addition to our food products.

They recognized the possibility that the new tter is not so digestible as the old. This is an gument for its being sold under its own name, t not for any actual restrictions upon its sale manufacture. There is, perhaps, a future danger in a less careful process of manufacture than now exists.

As establishments increase and competition becomes more active, the scrupulous care now said to be exercised may relax. This, however, would only justify the existence of official inspectors, and not the abolition of the industry.

The dairy interests in our State Legislature are very great, and the question of the food value of oleomargarine may be settled in the interests of this class rather than in that of the people. But it is to be hoped that the State will not interfere any further than to furnish assurance that the article is carefully manufactured, and is not being sold under any other than its own name.

As an evidence that the fear expressed, that adulteration would creep into the manufacture of oleomargarine, was not unfounded, *Gaillard's Medical Journal* tells us that "The success of butter made from beef fat (oleomargarine butter) has led to the use, in Chicago, of pork fat or lard for the same purpose. It has been reported that large quantities of this fraudulent butter have been shipped to England, seriously injuring the market for genuine American butter. The report is disputed by exporters, though it is admitted that sample lots have been sent by New York and Chicago dealers. Obviously, if lard butter is wholesome, and of good flavor, it can be sold on its merits; if bad, it should not be sold at all. In either case its sale as genuine butter would be a fraud and should be prevented."

Thus, then, to sum up, it would seem that there is nothing morally wrong nor physically injurious in the sale and use of oleomargarine; with these two restrictions: 1st. That it be distinctly labeled and sold as such; 2d. That it be sold at a lower price than genuine butter. It really constitutes a benefit to the poorer classes, since it enables them to enjoy a luxury hitherto denied them on account of its expense. Since it is harmless, it is brought down to a question of desire. If poor people, or any other class, desire to use oleomargarine, there is no valid reason why they should not do so; but it is only just that they should know what they are using, and should be able to procure it at a lower price than the more expensive genuine article. If legislation will force these artificial manufacturers to properly label this article of merchandise, the people will force the low price, by refusing to buy it at a high figure. Until this honest labeling becomes compulsory and universal, physicians and others ought to know how to detect the artificial from the genuine butter. Dr. G. C. WITTSTEIN, in an Austrian pharmaceutical jour-

nal, thus explains the simple method of distinguishing them: "Place a small piece of butter on an object glass, spread it out by means of a cover-glass, and observe it under a power of three hundred to four hundred. If it is pure butter, the whole field is filled with extremely fine globules, which are entirely destitute of any approach to crystalline form. If the butter is artificial, or a mixture of both, the field presents numerous angular or acicular particles between the globules. These crystalline particles are derived, no doubt, from the stearine which forms part of the beef tallow in artificial butter. Lard does not show any such crystalline particles."

Milk and Cream.

At the Paris laboratory, a sample that was exhibited as cream, and which appeared as natural as possible, and of excellent flavor, was found to have been manufactured with the residue of some red dye, mixed up with oil and sulphuric acid, in certain proportions. It is well known to every one that no article of food is so liable to contamination or adulteration, from carelessness or design, as milk. But the belief must only be the more strongly impressed by the recent report of Mr. Earnest Hart, the editor of the *British Medical Journal*, to the London Congress, when from a tabular abstract, made from a study of seventy-one recent epidemics due to infected milk, he made the startling statement that as many as thirty-five hundred cases of typhoid fever, eight hundred of scarlatina, and five hundred of diphtheria, could be directly traced to the drinking of impure milk. Dr. E. F. Brush, of New York, calls attention to the danger of feeding infants with milk taken from a cow only a few days after she has calved. The milk contains *colostrum*, which will produce severe symptoms of cholera infantum. Many dairymen, some through ignorance and others through carelessness, will mix this early milk with that from other cows, which then constitutes a dangerous adulteration. He cites the case of a breeder of fine stock, who allowed his calves to suckle their mothers as soon as they were born. They grew rapidly, were fat and sleek, and excited the admiration of the breeders of the neighborhood. But when warm weather came they all sickened and died. Subsequently he fed the calves artificially for a few days and had no more trouble.

It is hardly necessary to detail the well known fact that infected milk is one of the principal carriers of the typhoid fever poison; but the following case, which we believe has not yet appeared in print, will be instructive, as it shows more clearly than any we have ever met how extremely sensitive milk is to the influence of poisonous germs. A case of typhoid fever occurred in the house of a neighbor of a dairyman. The dairy was situated several hundred yards from this house. There was no water communication between them. The clothes and bed clothing of the patient were hung out to air. Very soon an epidemic of typhoid fever, commencing in the members of the dairyman's family, who were especially fond of milk, broke out, and was confined to those persons supplied from this particular dairy. Upon investigation, it was demonstrated that the only possible way in which this milk could have become contaminated was by the influence of the wind carrying the disease germs from the infected clothing toward the dairy. Since the presence of disease germs really constitutes adulteration of milk, though we believe, in the majority of cases, unintentionally on the part of the vender, it behooves every one to always remember and realize the readiness with which milk can absorb injurious elements. Since in many cases it is impossible to say how these disease germs may enter the milk, or to determine accurately, even by the most careful analysis, whether or not milk may contain some elements inimical to health, it becomes absolutely imperative that the two following rules should be scrupulously observed on all occasions: 1st. No milk should be allowed to be sold from any dairy in the vicinity of which there may exist any contagious disease; 2d. No milk should be allowed to be sold from cows that are in any way at all out of health. These two conditions can be carried out by the rigid enforcement of the following measure: In addition to the present inspectors of milk, or rather, in place of them, who examine and test the fluid when it has reached its destination, and who are of very little service, since they cannot possibly (because we have no means of doing so) detect the presence of disease germs, the surrounding country from which our large cities derive their milk supply should be divided into districts, with an inspector for each. This man should be a *practical* one, with a thorough knowledge of all the diseases of cows, and the means of recognizing them. It should be his duty to daily inspect the various dairies and ascertain the condition of the cows. By visiting the physicians of the neighborhood, he could find out whether any infectious or contagious disease existed in the vicinity of any dairy, and putting these two inquiries together, he could decide whether the milk supplied by any particular man would be liable to

convey disease. If any particular cow in a herd were found diseased, he could warn the owner to throw this milk away, until he had satisfied himself that the cow was well. If any contagious disease existed in the neighborhood, he could order such precautionary measures as would render the infection of the milk impossible ; but if such were not practicable, he could forbid the milkman to send his fluid to market until such time as the danger was past. Loss of license could be the penalty for non-obedience. By this means, if intelligent and capable inspectors were appointed, and would conscientiously perform their duty, the almost unpreventable contamination of milk would be reduced to the lowest pos sible minimum.

(To be Continued.)

News and Miscellany.

A Step Backward.

In the English House of Commons, on February 7th, notices were given of the intended introduction of the following bills: 1. Abolishing the compulsory clauses of the vaccination acts; 2. For the total abolition of vivisection; 3. For the repeal of the Contagious Diseases Act.

Half Knowledge.

The American Practitioner says: "Our American atmosphere is vocal with the flippant loqua city of half knowledge. We must accept whatever good can be got out of it, and keep it under, as we do sorrell, and mullein, and witch-grass, by enriching the soil and sowing good seed in plenty; by good teaching and good books, rather than by wasting our time in talking against it. Half knowledge dreads nothing but whole knowledge."

A Narrow-minded Physician.

Dr. Oliver Wendell Holmes says: "I have known a practitioner—perhaps more than one—who was as much under the dominant influence of the last article he had read in his favorite medical journal, as a milliner under the sway of the last fashion plate. The difference between green and seasoned knowledge is very great, and such practitioners never hold long enough to any of their knowledge to have it get seasoned."

The America of the Future.

The same facile writer says: "As the wine of old vintages is gently decanted out of its cobwebbed bottles, with their rotten corks, into clean, new receptacles, so the wealth of the new world is quietly emptying many of the libraries and galleries of the old world into its newly formed collections and newly raised edifices. No Englishman will be offended if I say that before the New Zealander takes his stand on a broken arch of London Bridge, to sketch the ruins of St. Paul's, in the midst of a vast solitude, the treasures of the British Museum will have found a new shelter in the halls of New York or Boston. No Catholic will think hardly of my saying that before the Coliseum falls, and with it the imperial city, whose doom prophecy has linked with that of the almost eternal amphitheatre, the bronzes, the paintings, the marble, the manuscripts of the Vatican will have left the shores of the Tiber for those of the Potomac, the Hudson, the Mississippi, or the Sacramento.

Pharmaceutical Preparations.

OBSERVATIONS ON THE DIGESTIVE FERMENTS.

Dr. William Roberts, in the *British Medical Journal*, says: "If properly prepared, malt extracts are rich in diastase, and have a high power in digesting starchy matters. But you will be surprised to learn, as I was, that a large proportion of the malt extracts of commerce have no action on starch. This is owing to a high temperature having been used in their preparation. Any heat above 150° Fahr. is destructive to diastase in solution; so that if the extract be evaporated, as is directed by the German Pharmacopœia, at a temperature of 212° Fahr., it is necessarily inert on starch. Out of fourteen trade samples of malt extract examined by Messrs. Dunston & Dimmock, *only three* possessed the power of acting on starch. These brands were Maltine, Corbyn, Stacy & Co.'s Extract, and Keppler's Malt Extract."

Items.

—The estate of a rich man is hallowed ground to the lawyers, and they will travel for hundreds of miles to prey upon it.

—Terra alba, or white earth, is used to adulterate white sugars, cream of tartar, and other commonly used articles. Its use tends to produce disease of the kidneys, bladder and stomach.

—Some men are inconsistent creatures. They will get up in the middle of the night and throw their boots at a dog because he is howling at the moon, and the next night pay five dollars a seat to hear Italian opera.

—The tower of the beautiful old church at Hempstead, in Essex, in which repose the remains of the immortal Harvey, has crumbled and fallen to the ground. Dr. Benjamin Ward Richardson is soliciting subscriptions to rebuild it.

—A Milwaukee naturalist stated in his lecture that a black bear could hug seven times as hard as a man, and the next time a menagerie visited the town every girl in the crowd made eyes and waved her handkerchief at the black bear, and paid him so much attention that he got confused and blushed.

—The new officers of the Philadelphia County Medical Society are: President, H. Y. Evans; vice presidents, Charles K. Mills, John B. Roberts; treasurer, William M. Welch; recording secretary, Henry Leffman: reporting secretary, Frank Woodbury; corresponding secretary, H. Augustus Wilson; assistant secretary, J. D. Nash, and librarian, M. O'Hara.

OBITUARY NOTICES.

JOSEPH PANCOAST, M.D.,

On March 7th, 1882, Joseph Pancoast, M.D., Emeritus Professor of Anatomy in Jefferson Medical College, died, at his residence, No. 1030 Chesnut street, of pneumonia, having reached his seventy-seventh year. His illness was of very short duration. He became prostrated, and his suffering from congestion of the lungs was acute. His condition steadily grew worse, death finally coming to his relief. He was attended by his son, Dr. William H. Pancoast, and Dr. Da Costa.

Dr. Pancoast was born in the year 1805, in Burlington county, New Jersey. Adopting the profession of medicine and surgery, he studied the same at the University of Pennsylvania, and graduated in 1828, with the degree of M.D. He at once commenced practice and made surgery his specialty. He began teaching practical anatomy and surgery in 1831, and during the same year edited a "Treatise on the Structure, Functions, and Diseases of the Human Sympathetic Nerve," by J. Frederick Lobstein. In 1834, he was elected one of the physicians of the Philadelphia Hospital; shortly afterwards, physician-in-chief of the children's hospital in the same institution; and from 1838 to 1845 he was one of the visiting surgeons to the same hospital. In 1838 he was elected Professor of Surgery in the Jefferson Medical College, succeeding Dr. George McClellan. In 1844 he published his "Treatise on Operative Surgery," which he revised and enlarged in 1852, when it had passed to a third edition. During the first nine years of its existence 4000 were sold. He also, in 1844, remodeled the able work (originally written by Dr. Caspar Wistar, to which the late Professor William E. Horner had made valuable additions), entitled "A System of Anatomy for the Use of Students." On March 27th, 1854, he was elected one of the surgeons of the Pennsylvania Hospital, and resigned that position on February 29th, 1864; in 1861, Professor of Anatomy in Jefferson Medical College, from which he resigned in June, 1873, his son, Dr. William H. Pancoast, succeeding him. Directly after his resignation, Dr. Pancoast was elected Emeritus Professor of Anatomy.

He filled for a period of thirty six years, successively, two of the most important chairs in that celebrated school. He also edited, at sundry times, "Manee on the Great Sympathetic Nerve," and the "Cerebro-Spinal System in Man," by the same author, and subsequently "Quain's Anatomical Plates." He was a voluminous contributor to the *American Journal of the Medical Sciences*, the *American Medical Intelligencer*, and the *Medical Examiner*, besides publishing various monographs, both pathological and surgical, and, at the time, the novel department of plastic surgery. He also published sundry essays and introductory letters to his class; the one of 1865 is entitled "Professional Glimpses Abroad." He was a member of the American Philosophical Society, of the College of Pharmacy and other scientific institutions. He was an eminent surgeon, bold, rapid, and skillful with the use of the knife, and in diagnosis almost invariably correct.

Among the many new operations devised by him was one for soft and mixed cataracts upon the eye; in 1841, a new process for removing cystic tumors; a quick process for correcting strabismus. He afterwards demonstrated that after the eyebrow had been destroyed a good-looking substitute could be made by raising a flap of the scalp, with the soft, drooping hairs of the temple, and giving it a long pedicle, to run in a bed cut for it up to the brow. He four times performed, with success, a lumbar operation for large abscesses lying in the connective tissue between the colon and cæcum and the front of the quadratus muscle. Later, he found that by cutting the posterior muscles of the velum palati at a certain point, a voice that was unintelligible could often be restored. He was the originator of the operation for the relief of atrophy of the bladder; performing it first in 1868, and it has since been followed here and in Europe. Amputations at the hip joint or even high up on the thigh, were formerly very fatal operations, from the excessive loss of blood. Far more patients died than recovered from these operations Dr. Pancoast devised a plan to prevent this by using the abdominal tourniquet, with a large roller compress over the lower end of the aorta, so as to shut off all the arterial blood from the lower limbs.

He found by trial that the patients could respire freely with this pressure, under ether, so as to give all necessary time for the operation. In June, 1860, he performed this operation on a large, muscular man at the Pennsylvania Hospital, and the patient lost but three ounces of blood, and rapidly recovered. His plan is now followed in all such cases in this country. In fact, it is now almost the fixed process.

There are cases of tic douleureux, involving all the branches of the second and third divisions of the fifth pair of nerves, producing for months and years horrible suffering, and for which there is no relief but the division of the trunks of these nerves, as they come out of their foramina, at the base of the skull. He devised a plan which he has successfully practiced and which has never failed of giving relief to the sufferer. Few men have contributed so many processes to the surgical profession as the great anatomist who has just passed away.

QUERIES AND REPLIES.

Dr. J. L. B. asks our correspondents "What proportion of men among their patients are affected with stricture of the urethra."

Dr. J. W. McC. You will find your query answered in "Special Report" No. III, in our issue of March 4th.

H. N. You can vaccinate a person who has eczema, without fear of any bad results.

MARRIAGES.

BURTON—STURTEVANT.—At Dover, Massachusetts, October 26th, 1881, by Rev. C. C. Sewall, Dr. C. W. Burton, of Adams, Massachusetts, and Miss Isabel Sturtevant, of Dover.

EMERICK—VORIS.—February 23d, 1882, at the residence of the bride's father, Gilbert Voris, Esq., near Potts' Grove, Pennsylvania, by the Rev. H. G. Finney; H. M. Emerick, M.D., and Annie M. Voris.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1308.] PHILADELPHIA, MARCH 25, 1882. [Vol. XLVI.—No. 12.

Original Department.

Communications.

MENTAL ASPECTS OF INFANTILE UNFOLDMENT.

BY THOS. S. SOZINSKEY, M.D., PH.D.,
Of Philadelphia.

In an article which appeared recently in the Reporter, I treated of various physical aspects of infantile unfoldment, the basis of my remarks being observations made on a male child (my own) who was healthy at birth, and was cared for properly from day to day. Taking observations made on the same child as the basis of my remarks, I will now treat briefly of some mental aspects of infantile unfoldment. This subject may or may not be of much value practically to physicians as such, but nevertheless it is eminently worthy of their attention, as well as that of thoughtful people in general. The discussion of it in a medical journal may not be entirely in place; but this should detract nothing from its interest. The two articles being supplemental to each other is, perhaps, sufficient reason for their appearance in the same periodical.

The mental unfoldment of children is a subject which, indeed, has received comparatively little attention as yet, but more, perhaps, than one might suppose from reading the extract from the circular to be given below. The celebrated Mr. Darwin has written a sketch of one of his children, M. Taine, the distinguished French litterateur, one of one of his, and Mr. Pollock, an English scientific essayist, one of one of his. The two authors last named dwell almost exclusively on the unfoldment of the power of speech. Among other writings on the subject with which I am acquainted are some by Preyer and by Perez, the former a German and the latter a French scientific author. All these are recent productions, and altogether are very far from being exhaustive.

Now, it may be well to explicitly say that the mental unfoldment of a child is very largely dependent on the impress of external influences; it does not occur, as many erroneously suppose, spontaneously. However healthy a child's brain may be, it will never have a well developed mind, if impressions of the right kind are not made on it, and made on it, too, in the right way. This truth does not seem to be known to some who are presumably versed to some extent in scientific knowledge; even the Educational Department of the American Social Science Association seems to be oblivious to it, if one may judge from a circular sent out by it to parents, last year, for the purpose of obtaining data to indicate the rate of development of the powers of the mind. In this circular replies to a large number of questions were asked for, but none as to the shaping external influences at play. The purpose of it, however, was good. It contained the following introductory remarks:—

"We have been made familiar with the habits of plants and animals, from the careful investigations which have from time to time been published—the intelligence of animals even coming in for a due share. One author (Lord Lindsay), alone contributes a book of one thousand pages upon 'Mind in the Lower Animals.' Recently some educators in this country have been quietly thinking that to study the natural development of a single child is worth more than a Noah's Ark full of animals. Little has been done in

this study; at least, little has been recorded. It is certain that a great many mothers might contribute observations of their own child's life and development, that might be at some future time invaluable to the psychologist."

"The natural development" of a child is something, I ween, which the Association will not soon become familiar with. Human beings are not, and cannot be expected to be, all similar in their mental development, as are some species of dumb animals. No; the development of the mental faculties of a child is in all respects greatly dependent on the character of its environment. A child whose mother or nurse takes little interest in it need not be expected to progress well, either physically or mentally. That from what the child is, a fair idea of what the parents, but more particularly the mother, are may be formed, is a true old saying.

Of course, it will not be inferred from the remarks just made that I believe that a child's mind at birth is, as it were, a mere blank page on which characters may be written at will. A child at birth has ingrained in its constitution the character of its ancestors for generations back. It may be possessed of special susceptibilities of an admirable or of an unadmirable sort. Still, as has been said, the environment of a child is extremely potential for good or bad.

The question is often asked, does a child at birth know anything? The answer is, No; it knows nothing. All that any one can ever know is gained through the exercise of one or other of the five senses; and not one of these is then in any other than a budding condition. A newborn child can hardly see; it can hardly hear; it can hardly smell; it can hardly taste; it can hardly feel. It takes time to unfold the power of every one of the senses; indeed, their unfoldment may continue at least until the decline of life begins. And simultaneously with the unfoldment of the power of the special senses unfolds the powers of the mind. The first impression that arouses consciousness, however faintly, whether it be received through one or other of the five senses, is the first step in the acquirement of knowledge. But there is only a glimmering perception of anything at the start, and the ability to recognize likeness or difference in things is of gradual and slow growth. The reflective power of a child under a year of age is very, very feeble. Had Dr. Holland studied infantile life carefully, he would likely not have written the misleading passage in "Bitter Sweet," beginning—

"Who can tell what a baby thinks?"

In what has just been said, the idea is implied, and properly, I believe, that at first a child is not easily hurt; acuteness of feeling is developed by degrees. The crying of a young infant is not necessarily caused by pain; when it is caused by pain the influence at play to produce the latter must be decided. This obtuseness of sensibility in tender babyhood is a provision of Nature, which is fortunate in the case of many a little creature.

It can hardly be doubted that even a newborn child is possessed of some degree of sensibility to pain. Whether or not it is possessed of some degree of sensibility to pleasure is a more open question, I believe. Assuredly, it is possessed of a decided degree of sensibility to both within the first month. And here I may observe that it should be known by every one, that just as soon as a child can experience pleasurable and unpleasurable sensations, just so soon is it possible and proper for systematic training to begin. Most of the talk which is indulged in about the impropriety of beginning education early is sheer nonsense; it cannot be begun too early, or be too energetically carried on, if it be of the right kind, and be rightly conducted. On this, as on many another subject, one can refer with advantage to the teachings of the sages of antiquity. "Pleasure and Pain," says Plato, "are the first perceptions of children," and continues, "The particular training in respect of pleasure and pain, which leads one always to hate what one ought to hate, and love what one ought to love, from the beginning to the end, may be separated off, and in my view, will be called education." Yes, that is really at least the supremely significant part of education; it is the part which has an active bearing on the conduct. In his work on the emotions and the will, the English philosopher, Bain, gives expression to melancholy truth when he says, "It is not usual to commence the discipline of children in the first year of life." Such parental dereliction is inexcusable. From the very start, what is right should be encouraged, and what is wrong should be discouraged. Let right feelings and emotions and manifestations of will be fostered and wrong ones repressed, from their inception forward. Parents who put off disciplining their children until their understanding is well developed, are deliberately letting bad traits get such firm rooting in their nature that their removal cannot be accomplished without much difficulty. Plutarch, in his essay on the "Management of Children," rightly declares it to be "Expedient that manners be well-

fashioned from the very beginning. For childhood is a tender thing, and easily wrought into any shape. . . . As soft wax, is apt to take the stamp of the seal, so are the minds of children to receive the instructions imprinted on them at that age."

On the day on which the child was four weeks old, it is recorded of him that "he clearly notices objects, particularly if bright, and follows them readily with his eyes when moved." Doubtless long before this impressions were made on the eye, attended with more or less consciousness. Even at a week after birth it is possible to make almost any infant follow an object with its eyes. Thus early does a child begin to learn; and it begins to learn not only through the eye, but through each of the other special senses. In respect to the sense of sight, I may further say, that for several weeks at first, in infants, there is reason to believe that the field of vision is composed merely of light and dark areas; and that degree of brightness only is appreciated. The sense of color is wanting; an infant is for some time completely color-blind. According to Preyer, blue is the last color to be correctly perceived. How soon a child shall be able to recognize any or all colors and their shades, is for the most part a question of opportunity to learn, and the effort its care takers may make to teach it.

I may here observe that tears do not flow freely until between the sixth and ninth week of age—a circumstance due largely to the fact that decided emotions are not experienced earlier. Subsequently, when a child cries and there is a flow of them, it is an indication, as a rule, of injured feelings. Crying unattended with tears is indulged in voluntarily, for a purpose.

From statements made above, it, of course, follows that the popular idea that a child does not "begin to notice" until it is five or six weeks old, is an error. The error arises probably from confounding mere noticing with obvious discrimination or recognition of similarity or difference in things. But it cannot be doubted but that most children have some power of discrimination before their fifth or sixth week. On the day the child was three weeks old it is recorded of him that "he evidently recognized his mother's breast, when brought into view, and was evidently pleased to see it."

When the child was six weeks old it was stated of him in the record that "for several days he has certainly been able to distinguish his mother from others." This means that at the age indicated the ability to at least identify an object was manifestly present; which ability implies the retention in the memory of an idea or mental image; for without the possession of memory the identification of an object seen before would be impossible.

When a child can identify its mother it must certainly be possessed of the ability to recognize differences too; for if there is no ability to recognize differences, of course, it would be impossible to distinguish an object seen before from others. Hence there is sufficient reason to believe that as early in life as the sixth week after birth the basal intellectual faculties, namely, the power to recognize likeness, the power to recognize difference and memory, are present, but, to be sure, only in their incipiency, even in the brightest of children.

It is recorded of the child that at seven weeks of age he would smile on being tickled. Far earlier than this smiles were observable, but likely they were not expressive of pleasurable feelings. Mr. Darwin's child manifested a sense of pleasure by smiling on the forty-fifth day. It is probable, however, as stated already, that considerably before the seventh week both pleasurable and unpleasurable feelings are experienced to a degree. By the time the child was three and a half months old he indulged frequently in loud laughter. It has been said that taste is the first of the senses to yield pleasure and smell the last.

When the child was three months old he apparently made some effort to imitate sounds, especially that produced by pronouncing the syllable "goo." It is probable that any imitation of sounds which he then made had little if any intellectual basis. In the record of his child, Mr. Darwin remarks, "When our infant was four months old, I thought that he tried to imitate sounds, but I may have deceived myself, for I was not thoroughly convinced that he did so until he was ten months old."

When midway between his third and fourth months, the child appeared to know his name (Thomas); at any rate, when it was pronounced he would turn his eyes in the direction from which the sound came. Of the Darwin baby it is recorded that "he was not able even when a hundred and twenty-four days old easily to recognize whence a sound proceeded, so as to direct his eyes to its source."

The first evident indication of preference of persons was shown by the child a few days before he was four months old. On being placed in the arms of a stranger he made decided efforts to get away.

At three and a half months the child took

notice of his hands. It is probable that when this is done there is some sense of individuality, a dawning recognition of self as something distinct from other things. It is questionable, however, I believe, whether any child has a well-defined sense of individuality or self consciousness until long after it is a year old, and in many cases a considerable time after use is made of the words "I" and "me." It is said by Preyer that in the fifth quarter a child may bite its own hand so badly as to produce crying; but I think it would be a very stupid child of over a year old who would do that. Tennyson speaks of this matter so interestingly that it is worth while to quote the following stanzas:—

"The baby, new to earth and sky,
What time his tender palm is prest
Against the circle of the breast,
Has never thought that 'this is I.'

"But as he grows he gathers much,
And learns the use of 'I' and 'me,'
And finds 'I am not what I see,
And other than the things I touch.'

"So rounds he to a separate mind,
From whence clear memory may begin,
As thro' the frame that binds him in,
His isolation grows defined."

On reaching the end of his seventh month the child could, in addition to being able to make various vowel and a few other sounds, say, "dada," "papa," and "baba." Before this period the sounds made were not of an articulate character. Six weeks later he could say "mama"—syllables which are erroneously supposed by most people to be about the first to be made use of by children—"dādā" and "dā." When ten months old he could pronounce with considerable distinctness the words "car," "girl," and a few others, and had undoubtedly some knowledge of their meaning. A week or two subsequently the phrases "take care," "bye bye" (good bye), and several others, were in frequent use by him. When a year old his vocabulary consisted of about a score of words. His power of speech was not remarkably well developed at the end of the year, but it was decidedly better than in many children, among them being Mr. Pollock's girl.

It is hardly necessary to say that there is no ground for the idea that a child tends naturally to speak what is ignorantly supposed to be the original language of the human race, namely, the Hebrew, an idea which I have often heard expressed. An infant at first has "no language but a cry," to use the words of Tennyson, and apart from, perhaps, some special adaptation of the organs of hearing and speech for the mastery of the language of its ancestors, due to inheritance, it tends to learn all languages with almost equal facility. The knowledge of the names of things, and the ability to express ideas properly, are acquired gradually; and indeed such acquirements, in the nature of things, may go on improving for life. For a long time a child has more ideas than it has language to express, as every one familiar with children well knows.

At eight months and ten days old the child manifested clearly a sense of fear. On bringing a dog into his presence he had a strong desire to place his hand on it, but hesitated long before he actually touched it, and when he did touch it he recoiled from the animal quickly. But let it not be supposed that thus early, or even when a year old, he was alive, to any great extent, to more than a few special dangers. It may be reasonably presumed, however, that some feeling of fear may be experienced as soon as one sensation can be readily distinguished from another, as those produced by the sight of different objects. Any strange impression, if decided and made abruptly will excite fear.

In this connection, I may observe that the emotions of a child may be intense, but are, as a rule, short-lived. By diverting the attention, apparently great distress can generally be made to vanish almost instantly. This susceptibility to impressions, and changeableness of feeling of children should never be lost sight of by their attendants.

An entry in the record made when the child was nine months old runs thus: "It is easy to get him to relinquish anything he has by presenting something else that is novel;" and this is followed by the following inference: "Evidently his memory is yet extremely short." Obviously this is another peculiarity of young children which can be taken advantage of to good purpose in their management.

It was when between nine and ten months old that the child began to have an appreciable ability to take an interest in more than one thing at the same time. This ability gathered force slowly. When even a year old, he did not hold an object in either hand at once with great ease; he was greatly inclined to drop one or the other. In truth, the power to take an interest in two things at once is not very decided in many that are several years old.

It was not until the child was nine months old that he gave any clear indications that he understood anything that was said to him. When asked then, "Where is the little boy?"—meaning a little picture which he had long been in the habit of looking at—he would look and point at

it. Three months before that, when a person held out the hand and said, "Shake hands," he would extend his; but it is, perhaps, certain that he did not do this as an intelligent compliance with a request. But for some time expressions of approval or disapproval were understood in a measure. At nine months it is said of him in the record, "The tones in which he is spoken to are evidently well understood and have been for some time;" and again "It is easy to teach him what he may or may not do. He will not take hold of forbidden things."

As has been implied in preceding remarks, when the child was at the end of his first year he was but to a very limited extent subject to the guidance of intelligence; he understood but little of what might be said to him, and that little was understood very imperfectly. This is equivalent to saying that children under a year old must be guided almost wholly otherwise than through the intellect. Anything which such children may do from time to time, of their own accord, that is proper, is done mainly through habit; it is done for the most part automatically. Hence, it is extremely important to inculcate good habits. Happily, this is easily done, as already intimated; and it may be begun almost at birth. Let the infant be led to behave for a time or two as desired, and it will afterwards do so of itself. Especially in reference to sleeping and feeding at set periods, can force of habit be brought into play to great advantage.

From remarks made it is evident that at the end of his first year the child's mental activity was decided. His different senses were then alive to impressions, and his emotions and intellectual and volitional powers were all of more or less force. Very much did he at that period, and considerably before, enjoy exercising his powers. And when it is done agreeably and gently, and not carried to the point of excess, it is advantageous for a child to exercise all its good powers, for in this way do they become stronger and more subtile. Such exercise should, of course, be encouraged, and the proper direction of it is or should be regarded as the main part of the art of education, household and otherwise.

I will now conclude. I have made a considerable number of remarks; but many more might be made without exhausting my theme. I would express the hope that what I have said in this essay, and the one referred to above, will lead many another to indulge in similar study. Such study well repays the observer by the pleasure it affords; and the welfare of the infants of the race is clearly bound up with it, which, of course, means, eventually, the welfare of the whole race. Well, indeed, is it, then, for every little innocent's parents to take an active interest in it, or, as the poet (Montgomery) says—

> "To mark its growth from day to day,
> Its opening charms admire,
> Catch from its eye the earliest ray
> Of intellectual fire;
> To smile and listen while it talks,
> And lend a finger when it walks."

IDIOPATHIC RETRO-PHARYNGEAL ABSCESS.*

BY ALEXANDER W. M'COY, M.D.,
Of Philadelphia.

In making some remarks upon the subject of retro-pharyngeal abscess, the writer is aware that the subject has received masterly treatment at the hands of some of the most distinguished surgeons of the past, as well as from those of our own time.

It is not with the intention of adding anything new concerning this affection that this paper is written. All the writer wishes to offer is the report of a case, of idiopathic origin, which came under his care a few months since; and also call attention to this rare and interesting pathological condition.

In the early part of August, 1881, John Carlin, aged 24, native, single, and a printer by trade, first presented himself for treatment at the Throat Department of the Jefferson Medical College. His statement was to the effect that he had always enjoyed good health, had not contracted syphilis, and had a good family history.

In November, 1880, after having played upon a trombone, the exercise was followed by a considerable hemorrhage from his lungs, which continued to recur in less amount for several days. but which yielded readily to treatment, and he suffered no injury to his health; nor did he lose any time from his occupation. In July, (one month previous to his presenting himself as a patient at the Throat Department of the Hospital) he was on a fishing excursion down the Delaware. His boat came in contact with a schooner; to save himself he jumped into the river and swam ashore.

One week after this accident he first noticed stiffness in his neck, which made rotation or flexion of his head painful. A few days afterward he began to find deglutition difficult and his "food stuck in his throat" (as he expressed it) and was regurgitated soon after. When he attempted to swallow fluids they came out of his

* Presented and accepted as a Candidate's Thesis, by the Philadelphia Laryngological Society, at meeting held January 27th, 1882, and published by order of the Society.

nose. He suffered much from severe pain in his throat, which at times was of a lancinating character, shooting up into and behind the ear. This sharp pain was greatly increased on movement of the head. All these symptoms continued, gradually increasing in severity up to the first visit to the hospital—one month from the date of his first symptoms.

On examination with a good light, the wall of the pharynx, on the right side, was seen to be of a dusky mottled-red color. There was great bulging of the back of the pharynx on the right side. This bulging extended half an inch above the soft palate. The swelling increased in prominence from above downward, until on a level with the top of the larynx, where it appeared greatest. The swelling filled up the space on the right side of the pharynx, and extended well over the median line. The redness was coextensive with the bulging, and was sharply defined where it ended. There was not the slightest swelling or œdema of the adjacent tissues.

On examination with the finger, the swelling was found to be elastic. Fluctuation could be readily felt on moderate pressure along the whole swelling.

This bulging gradually increased downward, encroaching upon the space of the gullet, until, when opposite the superior margin, and to the right of the larynx, the tension was so great that the finger could not be pressed further. The swelling appeared to be confined to the right side, for the most part, and no swelling or œdema of the epiglottis or larynx could be felt.

Laryngoscopy revealed the same conditions, but owing to the encroachment of the swelling a view of the inside of the larynx could not be obtained. His voice was unimpaired.

The treatment consisted of a small longitudinal incision with the bistoury in the upper third of the swelling. This gave rise to a free flow of white, creamy, inodorous pus. The dependent part of the abscess was emptied by pumping it out with the end of the finger, slowly pressed on it from below upward, until the contents were evacuated. This manœuvre was repeated three times a week, as the pus accumulated from time to time, until, at the end of twenty-four days the sac of the abscess had become completely closed. The tissues remained thickened. A firm ridge could be felt over the entire tract of the former abscess. This gradually disappeared. On examination one month afterward the tissues appeared normal.

Remarks.—This case appears to coincide with the experience of Bokai (whose very valuable and unique paper upon this subject is quoted so frequently by writers) in *this*, that it occurred *idiopathically*. Bokai's report is exceptional in showing such a large percentage of idiopathic cases, so many recoveries, as well as such a large personal experience.

Of 144 cases seen by him, all but 13 were idiopathic. In this record he differs totally from all other observers, who believe that the greater number of these cases are caused by disease of the vertebræ, and who make syphilis the prominent factor in its causation.

Hospital Reports.

COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CLINIC OF FRANCIS DELAFIELD, M.D.,

Adjunct Professor of Pathology and Practical Medicine.

Perinephritis and Cirrhosis of the Liver.

Gentlemen:—This patient is a boy, sixteen years old, who was admitted into the hospital September 20th. He is a printer by trade, and has been in the habit of standing in front of a printing press and leaning over to feed it. For some time past he has had slight pains in the abdomen and side, and he has ascribed these pains to the position in which he worked; but still he was pretty well until a week before his admission into the hospital. At that time he began to have very severe pains in the right iliac fossa, and he at once felt very sick, very much prostrated. He had repeated rigors, followed by febrile movement, and he had headache. To repeat, a week before his admission he was taken suddenly sick with rigors, with a febrile movement, with marked prostration, and with very severe pain referred to the right iliac fossa. The pain and the febrile movement continued, and there was some cerebral disturbance. He was delirious, especially at night. His bowels did not move at this time. He continued in this condition until he was brought into the hospital, with the exception that the constipation which had previously existed was succeeded by temporary diarrhœa. When the patient was brought into the hospital it was evident that he was suffering from a serious illness of some kind. He complained of the pain in the abdomen, which he referred to the right iliac fossa, very bitterly, and there was also very marked tenderness, and the patient lay in bed with his thighs drawn up, apparently to relieve the pain. No tumor could be felt in the abdomen. There was some tympanites. His temperature at this time was 102° F., his pulse 100. The patient was put partly under the influence of opium, and was in this way made more comfortable; but his temperature continued high, ranging between 102° and 104.2° F. The bowels were sometimes loose, sometimes constipated. The pain in the right iliac region still continued, although no tumor could be felt there. Matters continued in this condition until the 25th of September, when it was noticed that

the right lumbar region behind was becoming fuller than the left; that the skin and subcutaneous tissue felt œdematous, and it seemed that there was an abscess deep down in the tissues of the back. The temperature during this time continued pretty high, and the prostration was still marked. On the 26th of September an incision was made over this swelling in the right lumbar region behind, and when some depth had been reached a large amount of fetid pus was discharged. The opening was made pretty free and a drainage tube was inserted, so as to allow the pus to escape. The gentleman who made the incision introduced his finger and found that the cavity of the abscess was large, and he thought the kidney was pushed forward. The patient was made more comfortable by this operation; the temperature fell and his general condition improved. Since then he has been going on in very much the same way; when the discharge from the abscess is free his temperature falls to normal, and his general condition is good; but from time to time the drainage of the abscess appears to be no longer complete; there appears to be an accumulation of pus, and then the patient's condition is not so good; his temperature runs up, and he does not do so well. This abscess, therefore, has not yet healed up; it still discharges pus, and shows from time to time an inclination for pus to accumulate in it, and then the temperature runs up and the patient's condition is worse.

As we look at the boy at the present time, his appearance is not bad. He is rather pale, but his lips are of a fair color; he is somewhat emaciated, but not very much so. The drainage tube is still in the place where it was first inserted, in the right lumbar region, a little above the crest of the ilium, and the internal end of the tube points upward, showing that the pus cavity is up in this direction. The abscess, therefore, lies up about under the twelfth rib on the right side, pretty close to the spinal column.

Now, what is the diagnosis? "Perinephritis." That is highly probable. Does anything else suggest itself. "Perityphlitis." That is possible. "Psoas abscess." That is not likely. "Perforation of the colon." The history does not point in that direction. "Caries of the spine." That is not likely, with the previous history of the patient.

Perinephritis and perityphlitis are the two conditions that the diagnosis lies between. It is pretty certain that it is one or the other. To be more exact, we want to know exactly what is meant by the terms perinephritis and perityphlitis. By perinephritis we mean suppurative inflammation of the connective tissue about the kidney, usually behind it; and by perityphlitis we mean suppurative inflammation of the connective tissue about the vermiform appendix. In neither case need the kidney or the vermiform appendix themselves be involved in the inflammation. These parts may be involved, but it is perfectly possible to have inflammation of the connective tissue about the appendix or kidney without their being involved at all. In this particular patient there is no reason for supposing that there is any disease of the kidney, or of the appendix, but there is reason to believe there is suppurative inflammation of connective tissue. Well, when we get as far as this we have really gotten about as far as we can go. If you make up your mind that you have a case of suppurative inflammation of connective tissue situated just behind the peritoneum, it really is a matter of very little consequence whether this connective tissue is behind the kidney or whether it is behind the vermiform appendix, and in either case the situation of the inflammation would be very nearly the same, for there is only about an inch distance between these two portions of connective tissue. If we start with the supposition, which is probably the correct one, that neither the kidney nor the vermiform appendix has anything to do with the matter, you observe that we come to the fact of a local suppurative inflammation of connective tissue without known cause. We do not know why a person gets up a suppurative inflammation of this particular part of the body, and whether it occurs about the appendix or about the kidney is a matter of very little consequence. The process is essentially the same in the two conditions. Generally speaking, however, if the inflammatory process involves the connective tissue around the appendix the tendency of the collection of pus is forward, and when the abscess is opened it is usually opened in front, not behind. On the other hand, when the connective tissue about the kidney becomes involved, the tendency of the pus is to burrow backward into the muscles of the back, and when the abscess is opened it is opened through the skin on the back. For this reason I should infer that in this case the inflammation has existed in the connective tissue about the kidney, and not about the vermiform appendix, although I cannot at all deny the possibility of the latter being the case.

No pus has escaped with the patient's stools, and we may conclude that the colon has not been involved. Whether the pus be situated in the connective tissue about the kidney or about the appendix, it is always possible for it to perforate the caput coli, and for the abscess to empty itself into the large intestine in this way, and its contents be discharged with the stools.

Now, what are we to apprehend in this case? This abscess has been open and discharging pus since the 25th of September, but sometimes not freely, and at those times the patient has febrile movement. "We have to fear pyæmia, perforation of the peritoneum, resulting peritonitis." Those are two real and serious dangers to be apprehended, pyæmia and peritonitis, from perforation or extension of the inflammation. Is there any other danger? "Empyema." Yes, that is possible. "Amyloid degeneration." Yes, if the case should go on in this way, not developing peritonitis, septicæmia, nor empyema, and yet the suppuration continuing, there would be serious danger of there developing amyloid or waxy degeneration of the different viscera.

Now, what can we do to lessen the probability of these dangers? Here we come, perhaps, rather to a surgical than to a medical question, and yet it is a question which might arise in the medical practice of any one of you. "Enlarge the opening." The opening has been enlarged several times and yet the emptying of the abscess

is not satisfactory; and the cavity was washed out through a drainage tube, with antiseptic fluid, and yet that does not prove satisfactory. "Give the patient constitutional treatment." Well, after all, the trouble is local, not constitutional, and if the local trouble cannot be improved there is no constitutional treatment that will make any difference in the case. Of course, however, the boy should be kept in as good condition as possible. "Injections of iodine." I do not know that injections of iodine would be likely to do any more good than injections of carbolic acid. You would be afraid to inject strong iodine, and weak iodine would simply act as does carbolic acid, as an antiseptic.

Well, it seems to me that what is needed is a counter opening.

I think the trouble is, and it is a trouble which cannot be gotten rid of as things are at present, that the abscess has never been fairly emptied. You would say, very naturally, that the position is not at all a favorable one for a counter opening, and yet I think it would be quite possible to make one. In order to do that you would remove the drainage tube and introduce a blunt-pointed probe into the opening, upward and sideways, not backward, and try to bring the blunt point pretty near to the skin without risk to the peritoneal cavity, then cut down upon the point of the probe and introduce a drainage tube from one end of the wound to the other. Then it would be possible to wash out the cavity. Of course, I do not know, not having tried it, that this could be done, but without a counter opening it will continue almost impossible to wash out the cavity of the abscess thoroughly, and remove all the pus from every little pouch, and until this can be done there is little hope for improvement in the patient's condition.

Cirrhosis of the Liver.

You may remember that last week I showed you a young man who was very dropsical; there was very great distention of the abdomen, there was some œdema of the legs, and the history was that of cirrhosis of the liver, which had developed pretty rapidly, which had been accompanied by marked dropsy and by marked depreciation of the general health, and there were at the same time some changes in the urine, and I told you that the patient was a good example of that form of cirrhosis in which there is developed both dropsy and change in the nutrition of the patient. Both of these symptoms were very marked, and though we could not make out the size of the liver by either palpation or percussion, the dropsical effusion being so great, we remarked that it was probably quite small.

The patient died a few days later, and here is his liver, presenting a characteristic hob-nail appearance, and quite small. The spleen is very much enlarged, as you would expect in cirrhosis. The kidneys, which we supposed at the time would turn out to be atrophic kidneys, are not atrophied; they are nearly of normal size; but, although this is the case, they still belong to the atrophic variety of chronic diffuse nephritis. It is the atrophied kidney still in the earlier stages, before the kidney has become diminished in size.

I now present to you another patient, a man fifty years of age, who has been in the hospital a long time—since 1879. The first trouble which he had was swelling of the abdomen, and he had with this some dyspnœa, a little disturbance of the general health, and a little jaundice. He also was troubled with the piles. Since that time up to the present, he has been in the hospital on and off, and has been tapped repeatedly. After being tapped he is relieved for a time, then the abdomen again becomes distended with fluid, when he is re-tapped, and this has been going on now for several years, and yet you will observe that at the present time the patient's condition is good. You will observe that he now has considerable ascites, that his general appearance is good, his lips are of a fair color, and he is not particularly emaciated; his liver is diminished in size, his spleen is somewhat enlarged. There is no œdema of the legs.

This, then, is another case of cirrhosis of the liver which has caused ascites, and has lasted for a considerable length of time. But why his general condition should be good, while that of the former patient was so bad, is a question. If we could see this man's liver and spleen, we should probably find them in very much the same condition that we found those organs in the other patient, and yet in that patient the general condition was very different from what it is in this. Now, what is the reason of this? "There is very little functional disturbance of the liver in the last case." Yes, the liver, although it has undergone marked anatomical changes, is still able to perform its functions. This is a curious experience, although we are constantly meeting with it; we find the same fact to hold true with all the different viscera—with the brain, the heart, the lungs, the liver, the kidneys, the stomach, the intestines, that whenever these are the seat of an anatomical lesion there is greater or less disturbance of function, but the disturbance of function is not by any means always in proportion to the extent of the anatomical lesion. Why there should be this difference we do not know, but it is a thing which we are constantly meeting with, and it therefore becomes a matter of practical consideration. This man and the man whom you saw the other day, furnish two very good examples of it; both of them being patients suffering exactly the same anatomical lesion. I suppose that the anatomical lesion is just as far advanced in this man as it was in the other patient. In both patients there was the mechanical result of the anatomical lesion (dropsy), but in the former patient there was, in addition to this, a change in the general health, so great that the patient evidently died from want of nutrition; and in this second patient, in spite of the dropsy, the general health has continued good, so good that the man really would be well enough to go to work if it were not for the dropsy.

Then, in this last case you have a very good example of cirrhosis of the liver, of which dropsy alone is a symptom, while in the other patient you saw an example of cirrhosis of the liver in which both dropsy and disturbance of the general health were marked symptoms.

The patient whom I shall next show you is a man, fifty-four years of age, who was admitted

.nto the hospital on the 29th of November. The patient has been habitually intemperate, but still his health was good enough, or he considered it good enough, until the 19th of November, ten days before he was admitted into the hospital. Then he suddenly vomited up a large amount of blood, and for several days after this his fæces were of a black color, as if stained with blood. This vomiting and this discharge of blood with the fæces continued up to the time of his admission into the hospital. When he came into the hospital he was very feeble and very anæmic, and, as you see, he is rather white now, but he was very pale indeed, when he came into the hospital; both the skin of the face and the mucous membrane of the lips were exceeding pale, as if he had lost a large amount of blood. He was a little delirious. The temperature was 99.5° F. The specific gravity of the urine was 1.012, contained no albumen and no casts. He continued in this condition, very feeble, very anæmic and delirious, passing blood from the bowels, but no longer vomiting, until the 4th of December. Then the blood movements from the bowels ceased. The delirium, however, continued, although he was gaining strength and improving, and at the present time you will observe that he is able to sit up and walk about. His mental condition is better than it was; he is no longer delirious, but still his mental condition is not perfectly satisfactory. His color at the present time is pale, but he is not very much emaciated.

On physical examination, we find that the liver is a little increased in size, the heart is in its natural position, and only an anæmic murmur can be heard; the spleen is enlarged.

Now, what is the matter with the man? "Cirrhosis of the liver." On what do you base your diagnosis? "Disturbance of the function of the liver, enlargement of the spleen, hemorrhage from the stomach and intestines." He has an enlarged spleen, which would go with cirrhosis of the liver. He has had bleeding from the stomach, which is one of the symptoms of cirrhosis. The blood that was discharged by the stool I should suppose did not come from the intestine, but from the stomach; when passing into the intestine it was discharged through the rectum. Why should you suppose that there was functional disturbance of the liver? "He is somewhat emaciated and has some cerebral disturbance." He is not much emaciated, and the cerebral disturbance we might leave out of the question, there being other means to account for that, which we need not enlarge upon at present.

I think the only positive things we have, leaving out the cerebral condition, are the fact that he vomited a good deal of blood, so much that he became very much reduced, from anæmia; that this bleeding continued for about a week and then stopped, after which the patient began gradually to improve, and he has been improving up to the present time. More than this, there was no evidence of disturbance of the stomach; he had no pain about the stomach, he did not vomit except when he vomited blood, and he eats well enough at the present time. So that the case, after all, is one of bleeding from the stomach. The question, then, is, what is the cause of this bleeding. Cirrhosis of the liver is one cause which has been suggested as probably existing; is there any other? "There might be ulcer of the stomach." Yes, that, of course, may give rise to bleeding, and it may do so without there being present any other symptom; but still the rule is that when the patient's stomach is loaded he does have other symptoms in this condition; that he has vomiting and pain. Yet it is possible for a patient to have ulcer of the stomach and give no evidence of it but vomiting of blood, but the rule is otherwise. "Congestion, from an excess of alcohol." By that you would rather mean a chronic gastritis. That is a possible cause, but in that case the patient would be likely to bleed at different times and in moderate quantity; and then, too, we are apt to have other symptoms of chronic gastritis. "Malarial poisoning." Malarial poisoning, as a cause of bleeding from the stomach, I do not think we know much about in New York. "Cancer of the stomach." The patient is fifty-four years of age; an age at which cancer may occur, and this disease sometimes behaves in just the above manner; it will give no symptoms at all until the patient suddenly loses a considerable amount of blood from the stomach. Against that, however, is the absence of a cachexia, and the fact that the man has improved so much since the vomiting stopped.

The things which it would be possible for him to be suffering from are, cirrhosis of the liver, with obstruction to the venous circulation of the stomach; ulcer of the stomach; chronic gastritis; cancer of the stomach; and of these different conditions, the one which I consider most probable, taking the whole history of the case into consideration, is that of cirrhosis of the liver, with obstruction to a branch of the portal vein coming from the stomach.

So that you will observe this man furnishes us with still a third variety of cirrhosis of the liver; a variety in which there is no ascites, in which there is no interference with the function of the liver, in which there is simply interference with one part of the portal circulation, that coming from the stomach, and which has led to hemorrhage from the stomach and the man's present anæmic condition.

Medical Societies.

TRANSACTIONS OF THE OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated meeting, March 2d, 1882, Richard A. Cleeman, M.D., in the chair.

Mechanical Dilators in Gynæcological Practice.

Dr. Chas. H. Thomas had used the Ellinger dilator, and had been very much annoyed by a bad fault in the form of the blades. As soon as the instrument is opened the uterus shows a strong tendency to slip away from the dilator. This is due to the form of the outside edges of the blades, which gives to the dilator a wedge shape, with a difference of ten millimeters between the measurements of the base and apex. Conicity in uterine dilators is a dangerous quality; the instrument tending to slip in the direc-

tion of the base of the wedge. If the dilator when in use slips out of the grasp of the cervix it is likely to produce laceration; while if it slip inward, as most dilators tend to do, it will wound the fundus uteri.

Dr. B. F. Baer said he had found the same objections, and had tried to overcome them by having an instrument so made that the mechanism by which the blades are separated is placed in the blades themselves, close to their points, and entirely concealed when they are in contact. This gives great power to a *small* instrument, and as the outer surfaces of the blades are perfectly parallel, and cannot feather, because of the position of the separating mechanism, the instrument does not slip out. I do not now need a tenaculum to hold the cervix in place, which is a great advantage. I have also had the handles bent down so that I can see just what the instrument is doing, and by a screw, so placed that it can be worked on the left with the left hand, while the right hand holds the handles and separates the blades, the dilatation can be done slowly and deliberately, with less tendency to slip out, and with less pain than with the old instrument.

With regard to the result of dilatation of the cervix for the cure of sterility, my experience is based upon the treatment, by dilatation with the steel instrument, of more than two hundred women who where sterile because of a defect in the calibre of the cervical canal, either from stenosis or flexion, resulting from imperfect development. Where the sterility was the result of obstruction, dysmenorrhœa was almost invariably present. This experience leads me to the conclusion that, although the canal is made so patulous by dilatation as to markedly improve the dysmenorrhœa, and in many cases to cure it permanently, the sterility remains, in the vast majority of cases, if the patient has been married more than three years before coming under treatment; and, if she had attained the age of twenty six, or twenty-seven years before marriage, then, though she come under treatment immediately afterwards, she will very likely be sterile. This will apply to the great majority of cases, but not to all. I think the reason may be stated as follows: The long continued hyperæmia of the uterus, the result of dysmenorrhœa, which probably existed from puberty, and especially from the non-fulfillment of the sexual function by conception, gives rise to such changes in the histological elements of the uterus that, instead of the organ being muscular, and therefore possessing its natural resiliency, elasticity and suction power, it is hard, fibrous, and non-elastic. The mucous membrane lining the cavity also becomes so changed in its character that, if fecundation should take place, there is not a proper nidus furnished for the reception of the ovum, and it passes off without forming an attachment. The tissues of the fallopian tubes are likewise changed, and the tubes narrowed in consequence. This might explain the persistence of the sterility after the dysmenorrhœa has been relieved by dilatation of the cervix.

Dr. J. C. DaCosta had modified the Ellinger dilator by having the blades made very stiff and with a knob at the extremity, as in the uterine sound. When necessary he makes use of counter pressure over the fundus. In some cases he uses a small instrument first, to enable him to introduce the more powerful one through the internal os.

Respecting the statement of Dr. Baer, as to the incurability of sterility of three years' standing, he had recently had under treatment a lady who had one child seven years ago, but had since been sterile; the uterus was sharply anteflexed; a dilator was used for the relief of the flexion, and three months later the patient exhibited all the early signs of pregnancy.

Dr. Baer remarked that this case was not one of the class to which he had alluded. This patient had had a child, and anteflexion, probably the result of sub-involution and endometritis, was the cause of the sterility. Failure occurs in cases which have never been pregnant, and in which the uterus is enlarged, hard and changed in its histological character. He thinks it desirable to avoid multiplicity of instruments, and to have one dilator small enough to enter any os, and so arranged as not to yield to any pressure, but under all circumstances to preserve the parallelism of its blades.

Dr. Thomas thought that one reason why the sponge tent did good work, was because it worked slowly and continuously. Four years ago he made drawings of a modification of the steel dilator, to accomplish the same end. The instrument was made somewhat shorter than the ordinary one; the blades were absolutely parallel on the outside edges and were approximated by means of a screw passing through a slot in one handle and attached to the other. A milled head traversed this screw, and between it and the handle of the dilator was placed a spiral spring or a soft-rubber pad. This instrument was intended to remain *in situ* for twenty-four hours, the spring making the action gradual and continuous, one or two turns of the screw being given every two hours by the doctor, or nurse properly instructed. The doctor thought that in this manner he could secure many of the advantages of the sponge tent, and at the same time avoid its dangers.

Dr. R. P. Harris had recently seen, in a foreign journal, diagrams of a very neat instrument to accomplish the same purpose. It consists of a C-shaped spring, to the ends of which are attached blades long enough to pass through the internal os. The fingers pressed upon the top and bottom of the C closed the instrument for insertion. Its action would be regulated by the strength of the spring. To obviate the danger of slipping too far into the uterus, a dilator with diverging blades could be furnished, with shoulders to rest against the cervix. The divergence of the points of the blades he considers an advantage; the feathering reduces the apparent divergence in use, and that which remains helps to retain the instrument in place, particularly if the blades are furnished with shoulders. The dilating power is strongest where it is most needed, at the internal os. To meet an objection advanced by Dr. Thomas, he suggested that the shoulders might be made movable, to suit uteri of different depths. In every case in which a dilator is used the patient should be kept in bed until the direct effects are over.

He had recently under observation a case of dysmenorrhœa in which the dilator was used without effect, but in which a sponge tent effected a cure.

Dr. Baer thinks the blades should be parallel, and that dilatation should be uniform, without regard to the point of greatest constriction. Too much should not be expected from the dilator; a case of dysmenorrhœa could not be cured by one treatment; it is by the repeated use of the dilator, at proper intervals, that the best results are to be secured. As an instrument it replaces a set of graduated sounds, and the original inventor must have had that object in view. The contractility of the uterus must be overcome gradually; even when tents are used contraction will recur. The advantage of the dilator lies in its comparative freedom from danger, and in being less troublesome to the physician. It is indicated whenever there is constriction from any cause; for if there is not good drainage for uterine discharges, there will surely be irritation, resulting in endometritis.

The effect of the dilator on hypertrophy is the same as with sterility; if of long standing it is not curable; after the hard, fibrous stage is reached no reduction results from its use. But if the condition is recent, and the enlargement is of the muscular elements, or is due to engorgement, a cure may be secured; because here we have nearly the same condition which exists after labor, viz: a muscular uterus, having the power to contract and involute. I do not believe that chronic hypertrophy of long standing will, as a rule, yield to any treatment, but the symptoms to which it gives rise can be relieved, to a very great degree, in most cases.

Dr. Albert H. Smith regrets that Dr. Baer has not seen the admirable effects of the sponge tent on uterine hyperplasia. If you use a steel dilator in the uterus it can remain but a short time, practically not more than five minutes, giving a sudden mechanical dilatation, accompanied by probable rupture of the hardened fibres of the cervical canal; but it cannot give that stimulation to the contractility of the uterine muscles and to cell action that results from the use of the sponge tent, when no inflammatory action is existing. There is great resistance at first, but after the lapse of forty-eight hours the internal os and uterine walls have relaxed, spasmodic contraction ceases, and the vital power and muscular contractility of the uterus are developed by the presence of a foreign body which the natural powers will try to expel. Just as you have after the expulsion of an ovum a physical atrophy of the uterus, so you will have a similar action set up by the presence of a sponge tent in the cavity of the uterus. No such result could be secured by the use of a steel dilator; the latter must lacerate and leave surfaces ready to absorb septic matter, while you have not the advantage of the presence of the salicylic acid or other disinfectant present in the tent; the latter, expanding slowly, is not likely to cause laceration. The too early removal of the tent, while the spongioles are fast in the uterine tissue, may leave an abraded surface, but after forty-eight hours the tissues have shrunk away and the sponge comes away easily.

Dr. Smith read the following letter from Dr. Mundé:—

"My Dear Doctor:— * * * *

"Remembering your remark with regard to the absence of proper dilatation of tupelo-tents, I procured a number from Tiemann & Co., and dilated them in tepid water. I send you by this same post four different sizes, dilated and undilated, and also two perforated, zinc-lined tents—to be worn during the period, for dysmenorrhœa—one before the other after dilatation.

"This amount of dilatation was reached within one hour. Certainly no fault can be found with the expansion of these tents, since it will be seen, on comparison, that all the tents have swelled to fully double their compressed size and have retained their expansion on being dried. It may be objected that this full dilatation would probably not take place if a resistance were offered, as in the uterine canal. While I partly admit this, still I have, within a month, had reason to use the largest size, to dilate a uterus, and secured quite as much expansion as shown by the accompanying tent. The softness of the wood allows of their being whittled to any size and shape.

"I also send a tent dilated in utero, which shows some contraction at the site of the internal os.

"I presume that the failure of your tents to dilate may have been due to their having absorbed moisture from the atmosphere. They should always be kept wrapped in air and water-tight paper. Tiemann & Co. tell me that all their tents are compressed to their utmost by machinery.

"As for the other forms of dilatation, I have used the steel two-branched dilator of Ellinger, almost exclusively: I found it too difficult to force the graduated hard rubber sounds through the cervix, if it is virginal and hard; the tenaculum tears out and the force is too great. I have dilated in hospital and private practice (with two-branched dilators) in about one hundred and fifty different cases, probably some six to seven hundred times, chiefly for dysmenorrhœa and sterility, always in my office or dispensary. I have almost invariably relieved the dysmenorrhœa, temporarily at least, the sterility but rarely, although my later statistics on this point are meagre. I have but one bad result, pelvic peritonitis, and then curetting and tincture of iodine to the endometrium were also employed, either of which might be blamed. I prefer steel divergent dilators for temporary, tupelo-tents for permanent results. Slippery-elm tents dilate but little, but I have found them good in dysmenorrhœa, to render the canal patent."

Dr. R. P. Harris is using cylindrical sponge-tents, coated with salicylic acid, and finds that they have a local anæsthetic effect on the lining membrane of the uterus.

Dr. A. H. Smith, of the steel dilators which he has tried, prefers the instrument devised by Dr. T. G. Thomas, in which the blades are separated by being drawn into a canula by screw action. It is, however, difficult to clean. He has found the handles of Dr. Elwood Wilson's dilators very much in the way when the uterus is anteflexed.

Dr. Baer remarked that he was much in-

structed by Dr. Smith's remarks. He was surprised at the time—forty-eight hours—that a sponge-tent could be allowed to remain, and its effect in the disintegration of abnormal tissue without the development of the septicæmia. He finds it hard to believe a change could ensue after the uterine walls had been changed to hard, fibrous tissue; but experience is the best teacher.

PHILADELPHIA LARYNGOLOGICAL SOCIETY.

Reported for the MEDICAL AND SURGICAL REPORTER, by Dr. George T. McCracken, Sec'y.

Stated meeting, held Friday, January 27th, 1882, Dr. Cohen in the chair.

Dr. McCracken exhibited a case of Bilateral Paralysis of the Abductors, of which he gave the following history:—

F. G., aged 30 years, marble polisher, had chancre in 1871. Six or seven weeks after had typhoid fever, from which he made a good recovery, and felt well until the fall of 1876, when he caught cold. Since then he has had cough, with muco-purulent expectoration; has lost flesh, especially during the years 1878 and 9, but since that time has held his own. In the winter of 1878 and 9 he first noticed hoarseness, but without any soreness or pain in the throat. Difficulty in breathing commenced in May, 1880, and has steadily increased up to the present time. He has never had any secondary or tertiary manifestations of syphilis, and never complained of headache.

Present condition.—He has cough, with white, tough expectoration; there is inspiratory stridor, which is hardly noticeable when he is sitting, but the least exertion makes it very marked. There is evidence of old trouble at the left apex. On inspection, the epiglottis is found to be somewhat bound down on the left side by an old cicatrix. The vocal cords are reddened and thickened, and the chink between them is about ⅛ inch in width. In the act of vocalization the cords approximate, but during inspiration they do not move, and on deep inspiration, when the stridor is well marked, the cords retain the same position and are seen to vibrate.

Diagnosis.—Bilateral paralysis of the abductor muscles of the vocal cords, due probably to syphilitic disease of the brain.

In the discussion of this case Dr. Cohen said that the case was interesting on account of the presence of local and central lesions in the same organ, and was probably unique.

Dr. Potsdamer then read the paper of the evening, "A Case of Papilloma on the Right Vocal Cord, followed by Acute Phthisis."

In the discussion which followed Dr. Cohen said that he remembered the patient, and that she had had two attacks of what Charcot calls laryngeal vertigo.

Dr. Cohen then read Dr. A. W. McCoy's, "Report of a Case of Idiopathic Retro-pharyngeal Abscess." (See page 313.)

On motion it was decided to treat this paper as though presented by a member of the Society, and in the discussion which followed, Dr. McCracken related a case of retro-pharyngeal abscess due to disease of the body of the cervical vertebræ, in which the swelling in the pharynx occupied the entire right half, being limited by the posterior palatine arch and the median line of the throat, and in which there was an external fluctuating swelling.

Dr. Sajous related the history of a case which had come under his notice, and in which he believes the retro-pharyngeal abscess to have been of idiopathic origin. The swelling was to one side of the pharynx.

After a private session the rough minutes were read and approved, and the Society adjourned.

IOWA STATE MEDICAL SOCIETY.

Reported for the MEDICAL AND SURGICAL REPORTER, by the Secretary.

This Society met in its Thirtieth Annual Session, at Des Moines, January 25th–27th, 1882. The meeting was called to order at 10 A.M. by the President, T. J. Caldwell, of Adel, and was opened with prayer by Bishop John F. Hurst, D.D.

The following officers were present at the opening of the session: President, T. J. Caldwell, Adel; First Vice President, D. Scofield, Washington; Secretary, J. F. Kennedy, Des Moines; Assistant Secretary, L. C. Swift, Des Moines; Treasurer, G. R. Skinner, Cedar Rapids.

President Caldwell delivered his annual address at 2 P.M., to a large assemblage of the members. It was eminently practical, and he advocated preventive as well as therapeutic measures as the duty of the physician; and when the cause of sickness was ascertained it should be pointed out, and if preventable, removed. He pointed out the importance, as a sanitary measure, of sewerage and drainage, and as a means of proper diagnosis, the use of the microscope. He also spoke of the importance of our annual gatherings being made of more practical advantage professionally.

The following papers were read during the progress of the sessions:—

Dr. A. Reynold, of Independence, on the "Plea of Insanity."

Dr. J. A. Blanchard, of Des Moines, on "Inversion of the Uterus," detailing a case, with the method of relieving it, and giving an interesting epitome of the literature of the subject.

Following this was a good, practical paper by Dr. J. Williamson, of Ottumwa, upon the "Disappointments of Country Physicians in the Practice of Gynæcology." The basis of his remarks was a case of ovariotomy that he had performed and that resulted fatally. The Doctor was led to think that with better sanitary surroundings, better nursing, and the more constant attendance of the physician, a different result might be obtained. The papers elicited quite a good deal of interest, and called out a free discussion, participated in by Drs. Peck, Robinson, of Cedar Falls, Simonton and others.

Dr. R. J. Farquharson, of Des Moines, Secretary of the State Board of Health, read a paper entitled "A Smallpox Hospital." The Doctor gave in detail the plan and specifications of a smallpox hospital erected under his supervision, at Davenport, combining neatness, adaptability and economy. The entire cost was $2500. An animated discussion arose relative to the treat-

ment of smallpox, its prevention by vaccination, the particular advantage of such buildings as Dr. Farquharson constructed: and allusion was also made to M. Pasteur's experiments regarding the prevention of hog and chicken cholera by inoculation, as detailed by him in his remarkable paper read before the International Congress, at London.

A resolution was presented by the Secretary, adopted by the Dubuque Medical Society, regarding the care of the so-called "incurable insane."

Dr. M. W. Stone, of Wahoo, Neb., President of the Nebraska State Medical Society, was introduced by the President, and the courtesies of the Society extended him.

A paper on "Pyelitis Occurring During the Puerperal State" was read by Dr. L. C. Swift, of Des Moines.

After giving some cases, the Doctor emphasized particularly the advantages of the microscope in diagnosing this condition. It was discussed by Drs. Angear, Simonton, Robinson, Hazen and Carpenter.

Dr. Wm. Watson, of Dubuque, presented, through Dr. B. McCluer, a paper on "The Diseases Incident to Military Prisons, and the Influences by which they are Modified." The paper gave the result of his observations while Post Surgeon in charge of Confederate Prisoners, on Rock Island, and embraced several thousand cases. The paper was received, and owing to the absence of the author was read by title and referred to the Committee on Publication.

Dr. G. W. Beggs, of Sioux City, read a brief, pointed, practical paper on the "Management of the Newly-born Infant." He emphasized particularly the importance of wrapping the babe, as soon as it was born, in soft flannel, without washing, and letting it remain in that condition for ten or twelve hours. He believed the pressure to which it had been subjected in utero should be kept up for some time at least after birth, and hence advised the wrapping.

Dr. C. M. Hobby, of Iowa City, presented a paper on "Operative Procedure in Corneal Lesions," which was discussed by Dr. Young, of Burlington, and Dr. Blanchard. It was referred to the Committee on Publication.

"Life—What Is It?" Was the subject of a paper read by Dr. J. R. Gorrell, of Newton.

A paper on the "Local Treatment of the Mucous Membranes" was presented by Dr. E. H. Hazen, of Davenport.

The second evening of the session was occupied by the Section on "Microscopy." Dr. J. J. M. Angear, of Fort Madison, exhibited a number of microscopes, and illustrated, by well selected mounted specimens, the power as well as the beauty of this wonderful aid in diagnosis and in pathology. He gave also an entertaining talk upon Microscopy. Dr. McIntosh, of Chicago, who was present, made some striking and brilliant exhibitions of the power of the Solar Microscope.

The Woman's Christian Temperance Union presented a Memorial asking the Society to appoint from its number a Committee, to prepare a paper or pamphlet embodying the views of the Society upon the use and abuse of Alcohol. The Society thought it impracticable to comply with the request, but passed a resolution expressing sympathy with their cause, and commending the virtues they are striving to teach.

Thomas Dunn English, M.D., LL.D., of Newark, New Jersey, was introduced, and invited to participate in the exercises of the various sessions.

The Committee on Nominations made their Report, which was adopted.

Dr. C. M. Drumeler, of Panora, read, by request, a voluntary paper on "Fracture of the Skull."

All the foregoing papers, after being discussed more or less, were referred to the Committee on Publication.

The Treasurer reported a balance in his hands, after all bills of this session, of $1847.60, and the annual dues were reduced to one dollar per member.

After passing the usual complimentary resolutions and thanks for special favors, the Society adjourned to meet at Council Bluffs, on the third Wednesday in May, 1883.

Editorial Department.

Periscope.

Floating Kidney.

Dr. Landau, of Berlin, has written a monograph on this subject, from which the *Medical Times and Gazette* makes a long extract, the salient points of which we take. A movable kidney is noticed about once in a thousand necropsies. To get at the causation, one must consider the anatomy of the parts, particularly on the right side, and the especial risks and liabilities of women who have borne children. The kidney lies in a nest; it is a retro-peritoneal organ, receiving no true ligamentous fold from the serous covering of the abdomen, but kept in its place by the short and direct course, as well as mesial insertion, of its blood vessels, and by sub-peritoneal connective tissue on its upper surface, and a considerable bed of fat on its external and under surfaces. The anatomical causes of floating kidney may be briefly enumerated as follows: disappearance of the fat about the kidney, and consequent loosening of the peritoneum, especially rapid disappearance, as in acute fevers and acute phthisis; relaxation of the abdominal walls after pregnancy, or in consequence of large ovarian or other pelvic tumors;

prolapse of pelvic organs; tumors of the suprarenal and pancreas, and of the kidney itself. Among the physical causes are direct blows or injuries or repeated strains; coughing, especially where there is wasting of fat; tight lacing. The reason for the greater frequency of movable kidney on the right side, is because the right kidney is less closely and firmly fixed to the back wall of the abdomen, by the hepatic flexure of the colon than the left is by the splenic flexure. The important symptoms are caused by the traction or compression by the kidney, acting as a foreign body, upon nerves, vessels, and the viscera, and by functional disturbances. Hypochondria is frequently observed, especially if the movements be palpable and constantly attracting notice. Hysteria is not uncommon. Circumscribed neuralgias, often flying about, and appearing even in the intercostal spaces, or on the opposite side of the body. The symptoms referable to the great vessels are rare, but œdema of the lower extremity of the affected side, from pressure on the vena cava, has been observed.

Disturbances of the digestive system vary, from slight dyspeptic pains to sickness, chronic catarrh, jaundice, and even to attacks like peritonitis. The movable kidney may become incarcerated (hernia) or twisted upon its axis; an accident which produces sudden symptoms, a sharp pain, followed by tenderness of the whole abdomen, giddiness, cold sweat, small pulse, shallow breathing. Sometimes there is nausea and frequent vomiting; the urine is dark and scanty, and may be mixed with blood; there may or may not be a shivering attack, and fever may be slight. The threatening symptoms reach their height from the fourth to the sixth day; recovery is marked by the excretion of copious, clear urine, of low specific gravity. The prognosis is favorable, and the author does not advocate the practice of extirpating the floating kidney. The operation appears to have been done six times, with an immediately fatal result in three of the cases. As in displacements of the uterus, and in hernia, the principle of treatment is to replace the organ, and, if possible, to keep it in its place. The latter indication is, of course, the chief difficulty, and the author says that a great number of complicated appliances have been devised to that end.

Contagious Pneumonia.

We have twice this year referred to this question, and we have now a third instance to offer.

Dr. W. A. Patchett, in the *Lancet*, says: Four brothers and a sister, all unmarried, lived together; they kept a farm, and had lived together at the house all their life. The house was well and healthily situated, on a steep hillside, and all the sanitary surroundings, ventilation and water supply, were everything that could be desired, so that there could be no suspicion of any septic epidemic pneumonia, or of pneumonia from blood poisoning. The previous health of each of them had been exceptionally good; in fact, they did not remember having had any illness previously.

On January 13th, 1876, I was called to James S., aged seventy-three, the eldest of the family. I found him suffering from typical pneumonia, with crepitation over the front and consolidation of the base of the right lung, a temperature of 104.4° F., a flushed and dusky face, a pungently hot skin, short, hacking cough, with rusty-colored sputa. He had been ailing for three days, and began with shivering and pain in the side. The constitutional symptoms did not appear very urgent, but he rapidly got worse, and died on the 16th, or six days from the commencement of his illness.

On the morning of the death of James S., John S., aged sixty-six, who the day before had complained of rigors, complained of pain in the right side, and cough, with rusty sputa. He was found to be suffering from right pneumonia, which the following day had extended to the left lung. He also did not appear to suffer much, but he said he should not get better. The disease assumed an asthenic form, and he quickly sank, and died on the 19th, or in three days.

On the morning of the 20th Joseph S., aged sixty-three, complained of pain in the left chest, cough, with rusty sputa, and on examination, there was crepitation over the front of both lungs, and dullness over both bases; temperature 104°. The day before he had felt quite well, and was following his usual work about the farm.

On the evening of the 20th W. S., aged sixty-four, on going to bed complained of shivering and feeling cold, and the next morning, on my visit, he was found to be suffering from double pneumonia. In neither of these last two cases did the symptoms appear very urgent, but they were both very despondent, and had a presentiment that they would die the next day; and they did die on the evening of the 22d.

Miss S., the sister, aged sixty-one, had been in attendance on all her brothers during their illness, and she seemed to keep up her strength and health remarkably well; but on the 23d she was seized with right pneumonia, and she quickly sank, and died on January 26th.

As may be imagined, these cases created a profound sensation in the neighborhood, the popular opinion being that, as the brothers and sister had lived so affectionately together all their lives, the death of the eldest had so affected the others that they died "broken-hearted." Dr. Howard (who saw the cases daily with me) and myself were quite unable to explain such an occurrence. When the second brother sickened and died of pneumonia, we thought it was only a coincidence, and that probably nervous shock, caused by the death of his brother, had contributed to his death; but when the remainder of the family sickened and died, of a disease hitherto considered non-contagious, it seemed to point to something more than coincidence merely.

Vaccino-Tuberculosis and Vaccino-Syphilis.

Dr. J. Cappie Shand, commenting on this subject, in the *Medical Press and Circular*, says:—

A paper was recently read by Dr. Wolffe, at the Glasgow Medico-Chirurgical Society, in which he described a case of tuberculosis affecting the eye. He pointed out that a small particle of the tuberculous mass having detached itself,

gravitated through the clear fluid, and itself became the centre of tubercular development.

I would call attention to the fact that this case is of great importance in visually establishing the truth of the danger of transmitting that disease through the medium of vaccination from one individual to another. Moreover, as it is quite a recognized fact that local tubercle is developed by local inflammation, especially in the subject predisposed to tuberculosis, and bearing in mind that vaccination is a local inflammatory process, it becomes clear that a probability almost amounting to a certainty exists, that tubercle may be introduced to the previously healthy individual, through vaccination. Hence, it is necessary, before we take lymph from one infant to inoculate another, to examine, not only the condition of that infant, but also to inquire into its family history, which is practically impossible. Every one knows that an apparently healthy child may be tubercular, but this also applies to other diseases, notably to syphilis, and I may shortly substantiate my statement by recording the following case:—

Three years ago I was in attendance on the widow of a clergyman for a severely ulcerated leg. It did not look syphilitic, but as it would not yield to ordinary remedies, I afterwards used successfully the green iodide of mercury. I then obtained the further information that a child of hers contracted syphilis "through a wet nurse," and after the discharge of the latter the lady had a chancre on her mouth, the result of which I have just mentioned. This boy, however, although having an occasional rash, looked so healthy that one of our first medical men, who was then attending, expressed his urgent desire to obtain lymph from the child after being vaccinated.

All I have to say in favor of animal rather than humanized lymph is, that a breeder of cattle selects for breeding purposes those cattle which he considers healthy and free from disease, and consequently, I would expect greater immunity from hereditary disease among them.

I think syphilis may frequently be produced, as well as tubercle, and remain in the system for a length of time before being recognized; and I am further of opinion, with reference to vaccination, that it should be optional, although apparently desirable, and that it should be put upon such a footing as to prevent it from propagating such diseases as tuberculosis and syphilis.

Treatment of Pemphigus.

Dr. Charles Kennedy contributes to the *British Medical Journal* the following case and notes:—

A. C., aged 23, a shepherd, was admitted to the Royal Infirmary on December 5th, 1881. He was in good condition, and felt perfectly well, except for the annoyance of the skin eruption. His family history was good, and his circumstances comfortable; but he was often exposed to cold and wet in his occupation. The eruption covered the whole body, and had begun to appear a week before admission, in the form of red spots, on which bullæ soon formed and became rapidly larger, varying in size from a pea to a hen's egg. The bullæ were at first clear, but in a day or two became opaque, and then burst, leaving excoriated surfaces, on which crusts formed. The patient was put to bed, and a layer of cotton-wool was put under the back, to keep the raw surfaces left from being rubbed. In order to soften the crusts which had formed over the rest of the body, a little vaseline was applied to them. The bullæ were punctured at the most depending part, the serum which they contained allowed to escape, and care taken that the raised epidermis was laid down flat on the derma, so as to form a complete covering for it. Around the bullæ, which had become opaque, and their contents puriform, there was a ring of inflammatory redness and a good deal of irritation; but when they were punctured while the contained serum was still clear, there was no such irritation, new epidermis formed beneath, quickly, and little or no discoloration of skin remained. The last crop of blebs appeared about a week after the patient was admitted; and a week later he was dismissed, quite better, with only a few blains on the site of the bullæ, which had been followed by crusts. No internal treatment by arsenic or other drug was adopted, no medicine being given except a laxative; and the patient was put upon ordinary diet.

At the clinical lecture on the case, Professor Maclagan stated, as the result of his experience, that acute pemphigus in a healthy subject, as in the present instance, needed nothing but local treatment, as described above, which opinion was confirmed by the result of the case; that in chronic pemphigus, as in other forms of skin disease, arsenic was useful; and that in pemphigus foliaceus neither arsenic nor any other treatment was of real avail.

Ergot in Visceral Atony.

In the course of a concluding article on the Physiological and Therapeutical Action of Ergot, in the New York *Medical Journal and Obstetrical Review*, Dr. Etienne Evetzky makes the following observations:—

"There are a large number of diseases, the essential feature of which is defective innervation of the organic muscular tissue entering into the composition of a given organ. Although in some cases this relaxed state is a secondary result of inflammatory action in the part itself, in the majority of cases we have to deal with primary atony and deficient innervation. Whatever may be the ultimate pathology in any given case, the usual practice consists in the use of various excito-motors, such as strychnia, electricity, douches, massage, etc. Considering that stimulation of the organic motor centres forms the most essential part of the physiological action of ergot, it is rather surprising that it is not used more commonly in these cases, particularly as ergot is superior to any other excito-motor." He then notes the following disordered conditions: Atony of the stomach. When no definite disease exists, atonic dyspepsia is often due to a loss of power or tonicity on the part of the stomach. So also, in dilatation of the stomach, which is due in a marked degree to a paresis, from insufficient motor innervation, and is analogous to the uterine relaxation immediately after labor,

ergot will prove beneficial. Atony of the intestines. Manifested mainly by constipation, and brought about by irregular habits and sedentary life. Curran has succeeded in overcoming the torpidity of the bowels in paralytics with ergot, when the most energetic purgatives had failed to act. Its power of causing and increasing peristalsis can be verified by the reader; let him take a full dose of the fluid extract of ergot, and within half an hour he will notice the effects, varying from perceptible peristalsis to the actual inclination on the part of the bowels to move. Atony of the anal sphincters, which determines prolapse of the rectum, has been frequently relieved by hypodermic injections of ergotin, half a grain, in the vicinity of the anus, every few days, the parts being held in normal position by mechanical support. It has also been found useful in paralysis of the anal sphincter after parturition.

Langenbeck has obtained good results from its hypodermic use in invagination of the rectum. Two cases are reported of strangulated hernia readily reducible after hypodermic injections, that had resisted all mechanical efforts. Atony of the bladder, secondary to a diseased state of the spinal cord, or due to some functional disorder of its innervation, invariably yields to ergot. Sutton used it with marked benefit in the retention of urine during grave constitutional diseases, while Sorbet cured a case of incontinence of fifteen years' duration in eleven days. Malarial enlargements of the spleen yield rapidly to its influence. It will control excessive mucous or muco-purulent discharge. Ergot promptly checks excessive flow of milk, and is capable of suppressing it entirely. Diabetes insipidus, which is due to paresis of the renal vaso-motor apparatus, is almost always cured by ergot, while diabetes mellitus is often favorably influenced by it. Albuminuria and its accompanying symptoms have been temporarily benefited by it. Spermatorrhœa and prostatorrhœa, are much benefited by ergot in connection with sedative and tonic treatment. It has been found useful in diarrhœa and dysentery. It will relieve cerebral hyperæmia, and has furnished good results in epilepsy, sunstroke, and the various vaso-motor neuroses. When neuralgia depends upon vascular disorders of the nerve sheaths, ergot is very frequently of great benefit. Chevallereau administered a hypodermic injection of ergotin to a rheumatic patient to stop a hemorrhage; it acted also so well on the rheumatic symptoms that he persisted in this treatment, and used it in two other cases. In all these three patients the benefit was very striking.

Hypodermic Injections of Sulphuric Ether.

Dr. L. E. Dupuy has published a very interesting article, continued in several numbers of the *Progrès Médical*, on "Subcutaneous Injections of Sulphuric Ether Applied to the Treatment of Cholera during the algid period." We have room but for the following brief extracts, which, however, embody his principal conclusions. He first considers the hypodermic use of ether from a general point of view, and cites very fully all the authorities on the subject. In adynamic forms of typhoid fevers, pure ether under the skin has given good results; the pulse rapidly gains both fullness and strength; the heart beats, at first hardly perceptible, become more distinct; often, after one or two injections, cyanosis and collapse disappear, and the patient awakens from a condition which was considered desperate. Soon after an injection the patient may experience a local sensation comparable to that produced by an application of Mayor's hammer. There are many cases on record, however, in which the injections were equally effective, and yet have produced no local irritation.

In a case of profuse hemorrhage following labor, the patient was in a state of collapse. Three syringefuls at short intervals brought a rapid and favorable change. In a state of coma following copious hemorrhage, from the extraction of a naso-pharyngeal polypus, forty drops of ether hypodermically caused a rise in the temperature, which had fallen to 92.30° Fahr., and brought the youthful patient within the usual conditions attending surgical cases.

Ether, hypodermically injected, is rapidly absorbed; its effects become perceptible on the pulse after a very few minutes. The lungs will eliminate ether in ten to thirty minutes after an injection of from one-half to three-quarters of a drachm. It acts as a stimulant of the heart, and increases the frequency and energy of arterial pulsation. It revives the central organ, even when the cardiac muscle contracts but very feebly.

From experiments made upon animals, it would appear that injections of ether may be of benefit in cases of poisoning when the heart is feeble, and the pulse imperceptible.

Injections of ether cause a slight rise in temperature, something less than a degree. Our experiments warrant the observation that "the rise in temperature following ether hypodermically is the greater, in proportion as the central temperature was lower prior to the injections."

When temperature is less than normal, ether will determine a rise of one or more degrees, but its effects are only transitory; to maintain them, injections must be continued at regular intervals.

Owing to the rapidity with which ether is absorbed by the blood, its effects on the nervous system are stimulating, so long as it is administered within the limits already indicated; larger doses, and prolonged action of the remedy will be followed by resolution and anæsthesia.

Ether hypodermically is not only of benefit in cases of collapse following hemorrhages, or to individuals enfeebled by various causes; it has a direct effect on the total adynamia attending miasmatic diseases.

The effects of ether on the urinary secretions have not, as yet, been satisfactorily ascertained.

Dr. Dupuy devotes the second part of his paper to the treatment of cholera during the algid period. He admits that no specific has, as yet, been found in this disease. He says: In the algid period the pulse increases in frequency, becomes small, filiform, and very depressible; it becomes imperceptible at the radial, and progressively disappears from the humeral, crural, and finally, from the carotid arteries. The dis-

appearance of the pulse beats is considered a very grave omen, especially if it continues for some time. The heart becomes adynamic. Authorities differ as to the causes; but it is certain that an energetic excitant, acting rapidly upon the heart, through the agency of the nervous system, must prove efficient against the effects of cholera poison. Sulphuric ether, as has already been observed, seems to supply the requisites here indicated, and its rapid action upon the heart and the circulation must render important service in the treatment of cholera in the algid period.

The most serious cases of cholera are those in which there is a considerable fall in central temperature. We have reference to rectal temperature, as in cholera the axilla is an unreliable guide. A fall of one degree in rectal temperature should be looked upon as a grave symptom.

We hope we have satisfactorily proven that ether injections can produce a rise in temperature, and that this elevation is in proportion to the existing prior depression.

The following are the requisites in cholera algidity: rectal temperature, which in serious cases falls one or more degrees below, must be brought back to the normal point. This elevation should be rapidly obtained, because the disease makes rapid progress. It is equally important to be able to stop when desired, and only exercise a temporary effect on the temperature, because sudden hyperthermia is to be guarded against. From a theoretical point of view, ether injections seem to supply all these desiderata. We have had occasion to test their good effects in two cases, and believe them beneficial in all adynamic forms in which active stimulation of the nervous system is necessary.

It has been claimed that during the algid period in cholera absorption ceases, and medicinal substances remain without effect. This does not apply to the hypodermic use of ether. We have every reason to believe that the highly diffusible nature of this substance renders it particularly well fitted for the purpose for which it is recommended.

Physiological and Therapeutic Effects of Phosphorus.

The *Revue Médicale* states that M. Du Moulin recently read before the Medical Academy of Belgium some observations made on a case of poisoning by phosphorus, showing that the presence of this substance can be readily ascertained, notwithstanding the denials of the patient, and although but a small quantity may have been taken. The secretions revealed unexpected perturbations. Not only had the urine become icteric, but it was alkaline, and albuminous, and had, moreover, almost entirely parted with its earthy salts. Its density was reduced to 1.006, and the quantity of urea had fallen much below the normal. The urine also contained leucin and tyrosin. The stools were discolored (icteric) and mixed with blood. The perspiration was alkaline, as were also the matters vomited (these were a mixture of mucus and gastric juice). On the other hand, the saliva was strongly acid, but the laryngeal secretions had remained alkaline.

Essence of turpentine was given at different times, and invariably thrown up as soon as taken. A chlorate of potash gargle was then given, to counteract the buccal inflammation, but the patient swallowed the greater part of the solution. Finding that considerable improvement appeared to follow, and remembering that M. Huseman had recommended chlorate of potash in case of poisoning from phosphorus, the salt was continued, and in a few days the patient was convalescent.

Without positively asserting that this cure was due to chlorate of potash, M. Du Moulin believed that in similar cases it would be advisable to use this remedy, either alone or in combination with turpentine, should the patient be able to tolerate this latter.

Treatment of Epilepsy.

M. Ball, the present professor of mental diseases at the Paris School of Medicine, considers that the drugs most used in epilepsy prove much more efficacious when taken in combination with each other, than when one of them is administered singly. The alkaline bromides, particularly the bromide of ammonium, with belladonna and oxide of zinc, form the basis of treatment.

The following solution may be given, in tablespoonful doses:—

℞.	Ammonii bromid.,	ʒ iiss	
	Sodii bromid.,	ʒ iiss	
	Aquæ destil.,	f ʒ x.	M.

At the commencement of treatment four tablespoonfuls of this solution may be taken during the day, and the dose increased to eight or ten tablespoonfuls if no appreciable effect is noticed after a few days.

Belladonna and oxide of zinc are administered in pill form, as follows:—

℞.	Ext. belladonnæ,	gr. xv	
	Zinci oxid.,	gr. xv.	M.

Ft. pil. xl.

Sig.—One pill may be taken in the morning, another in the evening, at first; then the dose may be increased to four pills per diem.

If any degree of plethora exists the drastic purgatives should be resorted to, and in some cases benefit is obtained from a general bleeding, or the application of leeches to the temples or behind the ears.

M. Ball gives the following formula for drastic pills:—

℞.	Aloes,	gr. xv	
	Scammon. resin,	gr. viiss	
	Jalapæ resin,	gr. viiss	
	Calomel.,	gr. viiss	
	Saponis medic.,	q. s.	M.

Ft. pil. xxiv.

Sig.—These pills are to be taken once a week, three in the morning and as many more about noonday.

What is of importance to notice is the immediate beneficial effect of this combined treatment; this is sometimes remarked on the second day.

This method, like all other forms of treatment of epilepsy, should be continued for a long period, and should not be suddenly stopped; the doses should be progressively and slowly diminished when it is considered safe to lay aside the treatment.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

WHEN SHOULD CHILDREN BE SENT TO SCHOOL?

The old-time family physician, in his dual capacity, of healer of ills and general father confessor and adviser of his life-long patients, will frequently have this question propounded to him. Many parents will ask his advice on this subject; and it is a point that is worthy of more careful consideration than most persons stop to realize. In a country like ours, where the public school system is so universal that even the very poorest classes can afford to give their children some education, the temptation to send the little ones to school prematurely is very great. By so doing their minds are trained, and what is a great consideration to many parents, they get them "*out of the way*" for a goodly portion of each day. But we must ever realize that during very early life all the forces and energies of nature are required to enable the child to grow and develop physically, and that if this power be diverted from its natural channel to assist the premature development of the mind, the bodily or physical system will be apt to suffer for the want of it. We have no doubt that the most perfect adult, physically and mentally, would be produced, were the pre-puberty period of life devoted almost entirely to physical development, the mind receiving only the inductive training of example from intelligent and refined home influence, and if active school life was not allowed until this period. This plan would bring educated men out from their colleges to mix with and battle against the world at a more advanced age than is now the rule; but this would be all the better, since the whole being would be more mature and much more capable of meeting and successfully mastering the exigencies of life.

Since, however, this idea is opposed to the popular sentiment of our country, it becomes impracticable. But a modification of it will prove a great improvement on the present plan. When a physician is consulted about sending a child to school, he must take into consideration several points in making up his opinion. Does the child inherit any tendency to disease? If it does, this tendency will be fostered by the confinement of school life. Is the child of a nervous or a timid temperament. If so, the rough handling it will receive, and the worry over excessive desire to excel in study, so common to nervous temperaments, will prove injurious. Does the boy or girl evince a desire to study? If not, the necessary *driving* will be injurious. Is he well advanced, *physically*, for his age? If *yes*, then attendance upon school will do him no harm; if *no*, then he had better run wild for a year or two longer. If he is vigorous, and yet unruly and uncontrollable, then may school discipline correct these faults. If he is gentle and docile, and not notably hearty, with a slight tendency toward a scrofulous or lymphatic temperament, then will it be better to postpone his mental training for a time. The valuable lessons of *self-control* will not be so much needed by such a disposition as by one who is wild and self-willed. It would be well to inquire most searchingly into the ancestral history of a child before concluding. Because we all know that a tendency to disease may be inherited, and yet by

careful hygienic surroundings and conditions may be aborted, while bad sanitary conditions may foster and develop this latent tendency in its most virulent form. Therefore, in conclusion, after having considered all the points bearing on the case, ask yourself the question, "*Can the confinement and mental labor incident to school life* POSSIBLY *injure or retard this child's physical development?*" If your judgment answers in the affirmative or leaves any room for doubt, give the benefit of the doubt to the body, and advise against school. But if the reply is unquestionably negative, then you can safely advise school.

MEDICAL SCIENCE.

The publication and sale of books devoted to routine rules of practice, and volumes containing the favorite prescriptions of prominent physicians, would tend to make one think that there are certain doctors who practice medicine by routine; who will, when called to a sick man, go through a routine examination, according to some text-book direction, and having concluded that he has a certain disease to deal with, will order the formula committed to memory that he understands some great medical light has, at some time or other, used for the same disease. It is but little to be wondered at that such a machine-like doctor fails to cure many cases of severe illness that really require medical interference. His cases that would get well if left alone will sometimes recover under this foolishly empirical treatment, but he will rarely be successful in those cases that have a natural tendency toward dissolution, and can only be checked in their downward course by rational and energetic measures.

The reason is obvious. Medicine is not an exact science. We cannot say, as in arithmetic, that two and two, absolutely and without exception, make four. It is impossible to formulate any definite and universal laws for the alleviation of disease, since in each individual case the disease will present some peculiar phases, dependent upon the external and internal collateral circumstances that may exist.

The distinguished and successful practitioner is he who, with a thorough knowledge of the import and significance of every condition that may present itself, and with an intimate acquaintance with the uses and properties of all the remedial measures we possess, treats symptoms as he finds them. To him, it matters not what name you give to any particular group of symptoms. He does not treat typhoid fever because it is typhoid fever. But if he finds a dangerously high temperature, he endeavors to reduce it. He combats dangerous weakness. He controls diarrhœa. He antagonizes exhausting wakefulness; and thus by constant vigilance, and a reasoning and sensible treatment of symptoms, he manages to keep his patient alive until the forces of nature can effect the cure. Therefore will it be well for every physician who loves his profession and desires to be successful in its practice, to remember and act on this principle, that there are no absolute and universal rules for the treatment of sickness. It might almost be said that no two cases of the same disease will call for precisely the same remedial agents. He must recognize the importance of even the smallest and apparently least significant symptoms. He must be thoroughly acquainted with materia medica and therapeutics, when he can make up his own intelligent line of treatment and will not be compelled to use the antiquated and worn-out thunder of another man's brain.

Notes and Comments.

Hypertrophied Heart.

Dr. Samuel West presented to a recent meeting of the Pathological Society of London (*Lancet*) a case of hypertrophy of the heart, in which the usual causes were absent. The patient, aged forty-one, was well until three months before his admission to the hospital. He then had dyspnœa, pain and palpitation. The heart was found very large, no murmur, the arteries were hard, lungs emphysematous, and there was a small amount of albumen in the urine. Chronic Bright's disease was diagnosed. He became unconscious and died. At the autopsy, the kidneys were congested, but otherwise healthy; there was no sclerosis; the heart weighed twenty ounces, and was very large,

slightly fatty, no disease of valves, and no cause of the hypertrophy, which was confined to the left ventricle, was found. It was, therefore, a case of cardiac hypertrophy, without any of the usual causes being present. It also showed how such a heart may break down, without obvious reason. Dr. West suggested that the coronary arteries did not increase in size in proportion to the size of the heart, and so a point was reached where the blood supply was deficient, and fatty degeneration occurred.

Circumcision—Death.

Mr. F. H. Weekes reports the following case in the *Lancet:* A young man, aged seventeen, was admitted to the hospital with double inguinal suppurating buboes. There was also phimosis of an elongated prepuce, apparently due to the presence of three or four soft sores at the junction of skin and mucous membrane. General health good. Circumcision was performed in such a manner as to remove all sore places. This exposed a healthy glans, and a urethra free from inflammation. After the operation, the patient was comfortable for four days. The temperature did not rise above 98.5°. The wound healed for the most part by granulation, and there was scarcely any swelling of the penis. On the morning of the fifth day the temperature was 99.5°, and in the evening the patient was chilly and had a temperature of 105.4°. On the following morning the temperature was 105.4°; pulse 120, weak; respirations 30. He had been delirious during the night. The penis was slightly swollen and covered with a red blush; but this color faded gradually away, and had no definite margin. The posterior lower two-thirds of the left lung were dull on percussion, and in that region could be heard tubular breathing and broncophony. In the evening temperature was 104.5° although during the afternoon two five-grain doses of quinine had been given. The next morning temperature was 104.5°; pulse 130; respirations 30. He had not been sick, but had taken very little food. There was a dry, brown tongue, and involuntary passage of fæces. During the afternoon the patient became weaker, and died.

Nerve Stretching in Locomotor-Ataxy.

We read in Paris *Médical* as follows: Last year this journal published the results of nerve stretching in locomotor-ataxy, as practiced in Germany, and repeated in France by Debove. The first successes attending this method warranted the belief that a remedy had at last been found for relieving the lightning pains in ataxy, and, indeed, for curing the disease itself. Experience has proven, however, that this method only brings temporary relief, and that but little dependence can be placed on its good effects.

At the congress of German naturalists, held in Saltzburg, in 1881, German and Austrian physicians and surgeons were of opinion that this new method had given but illusory results, and that after an apparent improvement the disease again followed its progressive course.

Moreover, at a recent meeting of the Medical Society of that city, Bernhardt, Leyden, Litten, Goldammer, and Israel have adduced numerous facts dismissing all doubts, and proving that the elongation of the large nerve trunks, in cases of ataxy, may, for a few weeks, abate the lightning pains, restore cutaneous sensibility, and reëstablish equilibrium of motion in the limbs; but soon after the pains return, if not in their original seat, then in belt-like form around the body, and the motive troubles become more than ever aggravated; tactile sensibility alone continues somewhat longer, showing signs of improvement. According to this, it would seem that nerve stretching only awakens hopes in the minds of patients that are doomed to be disappointed.

Carbolic Acid.

At a recent meeting of the Surgical Society of Ireland (*Medical Press and Circular*), a discussion took place concerning the poisonous qualities of the carbolic spray in surgery. Dr. Warner read a paper, in the course of which he pointed out some fatal cases of poisoning from this drug. Mr. W. Thornley Stoker then said, "That he had seen the spray used in hundreds of cases, and never, in any instance, was the slightest symptom of carbolic acid poisoning produced, save one, a case of his own, where the carbolic oil was applied as a dressing to a large superficial burn." He believes that carbolic oil of the usual strength, one to four, is a dangerous agent when applied to burns of a large extent. He had never heard of an authentic case of carbolic acid poisoning (save the one mentioned) in the hospital practice of those around him. Mr. Hamilton stated that at Stevens' Hospital no capital operation—he might almost say no operation at all—was performed without carbolic acid, and so far as his experience went, he had never seen a bad result that could be set down in any degree to the poisonous effects of carbolic acid. Dr. Benson remarked that for two years past they had been using the spray in ophthalmic surgery, in St.

Mark's Hospital; there were only two cases in which operation was followed by suppuration, and in these cases the spray had been accidentally omitted. On the other side, Mr. O'Grady, referring to the alleged diminution of erysipelas from the use of carbolic acid, said he had been sixteen years attached to Mercer's Hospital, and never saw the disease there, except it was imported. His colleagues and himself had given up using carbolic acid, because they did not believe in it. He had seen mischief follow its use. In a case of ovariotomy, two or three days after the operation, while he was injecting an aqueous solution of carbolic acid into the wound, the woman, who was laughing and joking, became suddenly insensible and died in ten minutes. He could not attribute the death to any other cause than carbolic acid. Mr. Corley thought that the unfavorable results sometimes noted might be due to the use of impure acid. He had himself noticed some bad results when he used the ordinary carbolic acid, but had never seen any since he commenced to use absolute phenol, as recommended by Lister.

The weight of evidence in this discussion was in favor of the use of carbolic acid in surgery. That such an argument could occur, would tend to show that there is no absolute certainty about this question, but that, like many other articles in medicine, it may sometimes do harm, and this ought to be borne constantly in mind when using the acid.

Pyæmia from Otitis.

At a recent meeting of the Pathological Society of Dublin, Dr. Walter Smith (*British Medical Journal*) showed the left petrous bone, cerebellum, and lungs of a young man of 21, who had enjoyed good health until December 23d, 1881, when severe pain suddenly set in in the left ear and left side of head. Next day there were rigors, sweating, and vomiting. Was admitted into hospital January 1st. There was no history of any discharge from either of his ears. The temperature ran a completely typical course—on one occasion it fell to 96.7°, on another it rose to 107.4°. There was a similar want of accordance between the pulse and respiration records. There was complete absence of any paralytic symptoms, general or special. The sputum was rusty and streaked with blood, but physical signs of pneumonia were not discovered until January 9th. The cerebral symptoms then became latent. Examination revealed bulging of left membrani tympani, but there was no perforation or otorrhœa. After increasing dyspnœa, death ensued on January 15th. Spleen was found large and pulpy, weighing ten ounces and a half. There was some left pleural effusion; foci of embolic pneumonia were found in the left lung. The right lung was tough, non-crepitant, and in places quite gangrenous, with several softening, embolic pneumonic patches. Necrosis of the pleura was well marked on the surface of the lung. A small, greenish abscess was observed in the cerebellum, below the left corner of the pons varoli. A thrombus lay in the left lateral and superior petrosal sinuses. The left petrous bone was diseased and very fetid. The cavity of the tympanum was full of brown, grumous stuff, and its roof was broken down and perforated.

Operations in Individuals Subject to Erysipelas.

At a recent meeting of the Société de Chirurgie (Feb. 1st) M. Verneuil called the attention of the members to an important subject. In the course of practice, he found himself obliged to operate in three case where the individuals had had one or more attacks of erysipelas; in all three, erysipelas, either spontaneous or surgical, supervened, and the three patients succumbed.

M. Verneuil asks if his colleagues have no analogous observations, and if it would not be proper to consider the prognosis of graver import after operations or severe wounds in individuals who have been more or less subject to erysipelatous attacks.

M. Desprès does not consider that this circumstance aggravates the prognosis; he has operated in four such cases, and erysipelas supervened twice, but did not prove of any exceptional gravity. M. Marc Sée operated in one such case and erysipelas did not supervene, but a case operated by M. Gilette sustained the opinion of M. Verneuil.

In concluding, M. Verneuil, remarked that in the six cases reported by his colleagues, erysipelas appeared three times. It is true, as M. Desprès asserted, erysipelas is rarely fatal when the internal organs, liver, kidneys, lungs and heart are healthy, but under opposite conditions, or when the patient is a drunkard, the prognosis is very grave.

Treatment of Rabies.

At a recent meeting of the Société Méd. des Hôpitaux, of Paris, M. Gïngeot remarked that in a case of rabies he had employed the hoangnan, said to be much employed among Eastern nations. He did not observe any beneficial effects from its use, but it was not given until

late period of the malady. He considers that the medicament is best administered hypodermically, using a watery solution of the alcoholic extract, as the pills are swallowed with difficulty and frequently rejected by vomiting.

M. Dujardin-Beaumetz considers the Russian method of treatment the best of those at present known. The patient is placed in an over-heated room and garlic or sulphide of allyl is administered. Six months since he had three persons under his care, who had been bitten by a dog undoubtedly mad; they were submitted to this form of treatment in all its details and escaped without presenting any symptoms of rabies. Valdivine, which has been vaunted in this affection, has proved of no value in his hands.

M. Sévestre said that an attenuation of the symptoms was obtained in one case by the administration of pilocarpine, but the patient finally succumbed.

Kangaroo Tendons.

Mr. T. M. Girdlestone read a paper on the "Surgical Uses of Kangaroo Tendons," before a recent meeting of the Royal Medical and Chirurgical Society (*Medical Times and Gazette*). He stated his belief that for tying large vessels in their continuity, the long, even tendons from the tail of the Kangaroo were as strong as the silk ligature, and caused no ulceration in the coats of the vessels, and had all the valuable qualities of catgut, without its defects. It also makes an excellent suture, resisting the effects of purulent discharges for a long time. They have been used in Melbourne, in place of silk or gut, since 1877. In the deligation of main arteries, the inner coats of a vein could be divided or not, and the ends of the ligature cut off short. A reef knot does not slip nor become loose. When there is no suppuration the tendon coalesces with the tissues, and in suppurating wounds, though softened, they are found to still hold together at the end of eight days. The tendons were previously immersed for some weeks in carbolic oil, and entire tendons only were used. They have been employed in ovariotomy, and in vesico-vaginal fistula, and held till union took place. In plastic operations, hernia and varicocele, the tissues have readily healed over them. A medium-sized tendon is so strong that it is difficult to break it with the hands, and it is uniformly strong throughout its length of from twelve to eighteen inches. They can be hardened for use as sutures by immersion in a half per cent. solution of chromic acid, after which they can be also used as drains for wounds.

Nutrient Suppositories.

Dr. H. E. Spencer thus writes in the *Practitioner:* Artificially digested meat is mixed with a little wax and starch, and made into a suppository. These suppositories are of such a size that the digested and extracted product of twenty ounces of meat from which the insoluble matter is removed is contained in about five suppositories. It is easy for most patients to introduce them themselves; and their use is attended with no discomfort whatever, in the majority of cases. After an hour or two, the waxy basis is frequently returned, the peptone and extractive being absorbed. In some few cases, owing to irritability of the rectum, the whole suppository has returned; but this can be obviated by the addition of a little opium. He has had excellent results from their use in cases of gastric ulcer, stopping all food by the mouth for a fortnight or so, and ordering the patients to insert a suppository every four hours. Great relief was obtained by the same means, in a case of cirrhosis of the liver, where gastric irritation was a prominent symptom. The life of an old lady dying from gastric carcinoma was prolonged for several weeks. An immediate improvement took place as regarded the pain, sickness and prostration, and the patient was enabled to sit up and make her will. It is true that the amount of food administrable in this way is very small, but every practitioner who has had cases of obstinate vomiting under his care knows how minute a quantity of nutriment will "keep body and soul together" for several weeks or months.

Mitral Stenosis.

The thesis of Miss Mary Marshall (*Thèse de Paris*, 1879), inspired by M. Landouzy, is devoted to establish the assertion that mitral stenosis is much more frequent in women than in men, and that in a proportion of two to one. This conclusion is based on statistics compiled from French and English hospital reports.

The causes of mitral stenosis are the same as for other cardiac disease; rheumatism holding the first place; the influence of puerperal diseases is rarely noticed in the observations. To explain the greater frequency of mitral stenosis in females, the author brings forward the anatomical conditions, asserting that this orifice is narrower in women.

Again, it is said that during the child-bearing period the blood is less alkaline in women, and would, therefore, have the same irritating effects observed in rheumatism.

Modern Surgery—Extirpation of the Lungs.

Under this heading the *Medical Press and Circular* says: If the ancient masters of surgery were now to visit some of our modern hospitals, and see the operations therein performed under the protecting shadow of antisepticism, what surprise would they not evince at the daring of modern surgeons! Operations condemned in their day as unjustifiable and hazardous are now recognized standard ones. They would learn with surprise that we remove kidneys, spleens, uteri, portions of intestines, larynx, with perfect *insouciance*. It is even now proposed to extirpate one of the lungs. At a recent meeting of the Biological Society of Paris, M. Marcus (Jassy) suggested an operation for the removal of one of the lungs. M. Marcus believes that, as the lungs are dual, one could be removed; the other would do the work, just as one kidney does the work of two when one has been removed. M. Marcus has put his suggestion to proof. He extirpated the right lung in some rabbits and dogs. In spite of antiseptic precautions, however, they died. The dogs died rapidly; the rabbits lived for three weeks. M. Marcus thinks that his results are encouraging.

Premonitions of Epilepsy.

In the course of an article on epilepsy, in the *Practitioner* for February, Dr. Radcliffe furnishes the following as premonitory symptoms of an epileptic seizure, and the relative frequency with which each has occurred in his own experience:

Involuntary jerkings, startings and spasms	38
Vertigo	34
Unusual craving for food	29
Unusual sleepiness	25
Respiratory pauses, followed by long breaths	20
Hallucinations	12
Nightmare	12
Frequent pertes seminales	12
Rolling of the eyes	5
Grinding of the teeth	4
Palpitation of the heart	4
Headache	3
Tingling or numbness	2

local sensibility of the retina or conjunctiva, the reaction of the pupil to light, nor with the normal consentaneous movements of winking. Its effects are, therefore, confined to the exercise of visual sensibility.

I. P. Wall. *Congenital Absence of the Eyeballs* "Anophthalmia" (N. Y. *Med. Record* Mar. 26th). The tutamina oculi were perfectly formed, but there were no eyeballs, even in a rudimentary form. The lachrymal gland was present. The child was a white male, and six months old.

Special Reports.

NO. V.—OPHTHALMOLOGY.

BY CHAS. S. TURNBULL, M.D.

Effects of Eserine and the Mydriatics. Atropine, Duboisine, Homatropine and Hyoscyamine.

After a series of careful experiments,* Hermann Schäfer (*A. f. Oph.*, Vol. x, No. 2) states, in regard to the influence of eserine upon the three agents, atropine, duboisine, homatropine, that it counteracts the effects of homatropine completely and permanently; that of duboisine, and more particularly that of atropine, however, only when instilled in larger quantities, and then only for a brief period, after which it yields again to the effects of the latter.

The *absorption* into the aqueous humor of these three substances (atr., dub., hom.), as well as their *transmissibility*, has been demonstrated by experiments. Aqueous humor containing atropine and duboisine acts more rapidly when transferred. Aqueous humor containing atropine and duboisine secures maximum dilatation, but that charged with homatropine does not effect this result completely.

In general, it is sufficiently demonstrated that, as respects the *dilatation of the pupil*, atropine, if somewhat slower, possesses a more lasting influence than duboisine; that the latter dilates the pupil in a shorter time, and momentarily acts more energetically, but loses its influence more quickly; finally, that homatropine develops its influence in a briefer time than either of the other agents, but produces a lesser dilatation of the pupillary diameter, and is the first to decline in its effects. The degree of concentration in which the homatropine is employed is apparently without influence upon the duration of the effect.

The *accommodation* is paralyzed more rapidly by duboisine and homatropine—by duboisine even a little more so than by homatropine; with the latter, however, the normal state returns in twenty-four hours, with duboisine after three to four days. Paralysis of the accommodation by atropine proceeds very gradually, and persists the longest.

In accordance therewith would be the *practical application* of these three agents. Where it is desired to secure simply dilatation of the pupil for the purpose of examining the fundus, or to paralyze the accommodation for the certain determination of the state of the refraction, homatropine is decidedly to be preferred to the other drugs.

*Translated by Isidor Furst, M.D., of New York.

Dr. S. D. Risley, in a recent paper,* also concludes "That for the correction of anomalies of refraction in otherwise normal eyes the homatropine is to be preferred."

If, on the other hand, a therapeutical effect is desired, homatropine is to be set aside, on account of its insufficient and too restricted effect, and the application of atropine and duboisine can alone enter into consideration. Risley (*loc. cit.*), from a therapeutic standpoint, concludes "That, if retino-choroidal disturbance is also present, hyoscyamine or duboisine are preferable; (*a*) to atropine, because of the shorter duration of the treatment; (*b*) to homatropine, because of their more persistent control over the ciliary muscle; and that hyoscyamine† is preferable to duboisine, since the tendency to systemic poisoning is not so great."

Schäfer recommends the use of duboisine in iritic conditions, with or without extensive synechiæ, where atropine had been employed for some length of time, and with but partial success, on account of conjunctival and ciliary injection. Duboisine, he says, never causes conjunctival irritation, and even diminishes that caused by atropine.‡

Dr. H. Knapp (*Archiv f. Ophthal.*, Vol. x, No. 2) reports *three cases of quinine amaurosis.* The characteristic features of this affection, according to Roosa, Wecker, Voorhies, Michel, Gruening and Knapp, are:—

1. Total blindness subsequent to the taking of large quantities of quinine.§

2. Pallor of the optic disks.

3. Marked diminution of the retinal blood vessels, in number and calibre.

4. Contraction of the visual field.

K. mentions some *other symptoms:* "1. *Diminution of the color-sense* (red-green, then green blindness); 2. *Diminution of the light-sense* (as if a vail was over the eyes); 3. *The pupils during the total blindness are irresponsive to light*, but (Gruening) move on accommodative efforts; 4. *Anæsthesia of the cornea;* 5. *Impairment of hearing*, to total deafness, and *tinnitus aurium* in every case, *though transient.*"

The subjective noises and deafness, though exceedingly frequent symptoms of quinism, are always transient; I, at least, have not been able to trace one case of persistent deafness or tinnitus aurium to the use of quinine alone. (L. Turnbull has long since emphatically expressed himself in a similar way.—Rep.) The impairment of sight will, I suppose, disappear entirely in the mild cases, whereas in the severe typical ones the restoration of the central acuteness of vision seems to be complete only in a certain number of cases; in almost all, however, a fair amount, $\frac{20}{200}$ to $\frac{20}{70}$ of S., is regained. The contracted visual field expands slowly, commonly does not reach its natural limits again.

The progress of quinine amaurosis, even in advanced cases, is, on the whole, good, as there is, thus far, no case of permanent blindness on record, and the typical, *i.e.*, fully developed cases, are very rare. How frequent the mild cases are, and how rapidly they recover, remains for further investigation to ascertain.

No beneficial mode of treatment seems yet to have been discovered. The "depleting therapy" to which v. Graefe ascribes the recovery in his second case will, in view of the marked ischæmia of the retina discovered of late, scarcely find any advocates now. Nitrite of amyl, given in the way of inhalation, by Voorhies, Gruening and Michel, showed no effect. Strychnia and other remedies, as well as electricity, were likewise inefficient. Horizontal position, as long as the general anæmia, and particularly that of the brain and eye, are marked, seems beneficial. Generous diet, with perhaps gentle stimulants, and as soon as practicable, sojourn and exercise in a healthy, invigorating atmosphere, appear rational means of recovering strength, and supplying the retina with what it most needs—blood."

Dr. J. J. Chisholm, of Baltimore, at the last meeting of the Am. Med. Association, read a paper on the *Actual Cautery Needle in the Treatment of Conical Cornea.* The operation is performed with a fine sewing needle, heated to whiteness in an alcohol lamp, and thrust through the apex of the cone. The subsequent cicatrization causes a flattening of the cone. Dr. C. also exhibited a *needle designed for the destruction of*

The causes of mitral stenosis are the same as those of other cardiac disease; rheumatism holding the first place; the influence of puerperal diseases is rarely noticed in the observations. To explain the greater frequency of mitral stenosis in females, the author brings forward the anatomical conditions, asserting that this orifice is narrower in women.

Again, it is said that during the child-bearing period the blood is less alkaline in women, and would, therefore, have the same irritating effects observed in rheumatism.

* "The Comparative Value of the Mydriatics," Transac. Am. Ophthal. Soc., 1881.

† Hyoscyamine grs. ij to f3j. R. fears they adulterate Hyos. with Atrop.

‡ We cordially endorse Shäfer's recommendation of duboisine in iritic conditions.

§ The *total blindness*, in all the cases thus far made known, was only temporary.

H. M. Bannister. *On Some Points in Regard to Color Blindness.* (*Jnl. of Nervous and Mental Diseases*, Jan.) B. takes the same position as the reviewer (Burnett), in his article in the last number of the *Archives f. Oph.*, *viz.*: that the cause of some cases of color-blindness is to be found in the brain-centre and not in the retina; and thinks that the defect in color-sense can be improved by exercise. He thinks Holmgren's test tends to magnify slight defects in the color-sense, and that more than one method of examination should be used where we want extreme accuracy.

C. S. Bull. A contribution to *the Pathology of Orbital Tumors;* being a study of the secondary processes in the peri-periosteum and bones of the orbit and vicinity (N. Y. *Med. Journal*, March).

Case 1.—Encapsulated orbital sarcoma; extirpation; return of the growth as a myxo-sarcoma; infiltration of the bones of the orbit, and of the facial bones of the left side in general; three operations for the removal of the tumor.

Case 2.—Intra-ocular sarcoma; secondary infiltration of the optic nerve and orbit; degeneration of the orbit and face; four operations for the removal of the growth.

Case 3.—Fibro-sarcoma of the orbit, involving the periosteal lining, and subsequently, the bones of the orbit and face.

B. concludes, from a study of these cases, that such growths are not fit subjects for operative interference." We would most emphatically endorse B.'s opinion, as experience, in numerous cases similar to his, has taught us how futile operative interference has proven itself to be.

J. C. Dalton. *Centres of Vision in the Cerebral Hemispheres* (N.Y. *Medical Record*, March 26th). From experiments performed on dogs, D. feels justified in concluding: "1. Extirpation of the angular convolution causes loss of visual perception on the opposite side. 2. This operation is not followed by any disturbance of the intelligence, attitude, power of locomotion, or general sensibility. 3. It does not interfere with the local sensibility of the retina or conjunctiva, the reaction of the pupil to light, nor with the normal consentaneous movements of winking. Its effects are, therefore, confined to the exercise of visual sensibility.

I. P. Wall. *Congenital Absence of the Eyeballs* "Anophthalmia" (N. Y. *Med. Record*, Mar. 26th). The tutamina oculi were perfectly formed, but there were no eyeballs, even in a rudimentary form. The lachrymal gland was present. The child was a white male, and six months old.

W. C. Ayres. *The Physiology of the Visual Purple* (N. Y. *Med. Journal*, May). A. sums up his conclusions as follows: "We know that the purple is a photo-chemical substance which is sensible to light, and that its seat is in the outer segments of the rods, whereas it is never found in the cones. The cones, on the other hand, being the only elements found in the fovea centralis, we are forced to the conclusion that distinct vision, both for objects and for colors, is independent of its existence. In the higher classes of animals it is sensitive to light, but in some deep-sea fishes, cephalopods, etc., it has its seat in the rods, but is no longer sensitive to light, although it has the same color as before. Where it is not sensitive to light the optical structure of the eye is very defective. It is an albuminoid compound, and is a secretion of the pigment epithelial cells of the retina; but this secretion is not controlled by any of the larger nerve trunks, which have a part to play in the functions of the eye. We know of no drug which can diminish its secretion, but pilocarpine and muscarine greatly increase it."

In their report on the Progress of Ophthalmology, for the first half of the year 1880,* Drs. H. Magnus and A. Nieden, note the following:—

Beauregard. *Suppuration of the Vitreous.* B. says the pus cells come from the cells of the choroid. (Sec. *de Biol*, Paris, June 12th, 1880.)

Knies, M. *Argyria Oculi* (Z. M., Vol. xviii, p. 165). After external application of the nitrate of silver stick for fifty years, K. observed two modes of staining of the tissues, one being diffused, the other consisting of minute granules. The cornea was stained brown, especially in the centre; the epithelium and endothelium of Descemet's membrane were free; the subconjunctival tissue was, in its whole extent, pervaded by lymph spaces, which were densely filled with granules of silver. In transverse sections the blood vessels were surrounded by black rings, the adventitia being densely filled with granules.

Haltenhoff. *Conjunctival Hemorrhage* in a new-born child. Hæmophilia; uncontrollable hemorrhage caused *death* in thirty-six hours (Rapp. sur. les trav. dela. Soc. Méd. de Genève, p. l'an, 1879).

Högyes, A. *The Changes of the Eye after Extirpation of the Facial Nerve* (*Archiv. f. Exper. Pathol.*, Vol. xi, p. 258). After simple division of the nerve permanent affections of the cornea are rare; after evulsion, the cornea becomes dry, with more or less extensive ulcera-

* Translated by R. O. Born, M.D., of N. Y., *Archiv. Ophthal.*, Vol. x, No. 2.

tion; after division of the trigeminus the eye is always lost by the subsequent neuropathic keratitis.

KRETSCHMER. *Keratitis Neuro-paralytica.* Panophthalmitis after neurectomy of the infra-orbital nerve (*C. f. A.*, March, p. 65, with polemic correspondence, l. c., pp. 163, 236, 293, 363).

GALEZOWSKY. *A Case of Congenital Irideremia* (absence of the iris) through several generations (*Rec. d' Oph.*, 3, No. 2, Feb).

WOLF (Glasgow). *A Case of Bleeding Tumor of the Iris*, about four mm. in diameter, bleeding every four to six weeks (*Med. Times and Gaz.*, May 8th, p. 504).

CHISHOLM, J. J. *A piece of metal in the eye for 23 years, without causing sympathetic ophthalmia* (*Bost. Med. Jour.*, Vol. CII, p. 248).

SCHNABEL. *Secondary Glaucoma.* Upon an observation of glaucoma after traumatic luxation of the lens and stretching of the fibres of the zonula in incarceration of the capsule into the wound, the author is opposed to Knies' view of an occlusion of Fontana's spaces. The abnormal stretching of the zonula is said to be the only cause of glaucoma, especially since the author observed the cure of an acute attack in chronic glaucoma, by the spontaneous luxation of the lens, with detachment, and thus relaxation of the zonula (*Wien. Med. Bl.*, Vol. III, Nos. 6 and 7, p. 130).

BREMER, VICTOR. Among 223 *deaf-mutes*, HANSEN and KRENSCHEL found 9 cases = 4 per cent. of *retinitis pigmentosa* (*Inaug-Dissert., Kopenhagen*, 1880).

GATLI, FR. *Amaurosis produced by salicylate of soda poisoning* (*Gaz. Degli. Ospit.*, Vol I, p. 129).

URTHOFF. *Atrophy of the optic nerve*, with special consideration of, 1, the causes; 2, the knee phenomenon (patellar-tendon); 3, the condition of the visual field. It comprises 83 cases. The knee-phenomenon is absent in 13 out of 15 cases of spinal atrophy of the optic nerve, in one-third of the cases of genuine progressive atrophy, and is, therefore, a valuable symptom for the differential diagnosis. In 7 patients there was at the same time myosis. In spinal and simple optic nerve atrophy, the limitation of the visual field begins in a small majority of cases at the outer side (*A. f. O.*, Vol. XXVI, No. 1, p. 244).

HAFFNER. *Rare migration of a round worm*, 3 cm. in length, *into the left lower lachrymal canal*, in a child suffering from severe whooping-cough (*Berlin. Klin. Wochensch.*, No. 24).

SIGSMUND. A small *splinter of wood* kept *in the eye for 47 years without any disturbance* (*Berlin. Klin. Wochensch.*, No. 5, 1880).

ERB. *The ocular affections in tabes dorsalis.* Among 56 cases there was seven times atrophy of the optic nerve, and seventeen times paralysis of ocular muscles (*Deutsch. Archiv. f. Klin. Med.* 1879).

STEWART, GRAINGER. The *eye symptoms in locomotor ataxia.* Among 70 cases there were 20 cases of squint, three of ptosis, four of diplopia, without manifest squint; seven of myosis, four of difference in the pupillary diameter, eight of immobility to light, while the pupils contracted upon convergence; four times temporary amblyopia with subsequent improvement; fourteen times atrophy of the optic nerves with amaurosis in one-half of the cases at quite an early period (*C. f. Med. W.*, 1880, *p.* 62).

HOSCH (Basel). *Embolic Panophthalmitis* in *Puerperal Fever.* Literature of 15 cases. H. found in one case large accumulations of micrococci in some of the smaller retinal vessels, also in numerous uriniferous tubes, and in more developed stages in the vitreous body (*A. f. O.*, Vol. XXVI, No. 1, p. 177).

News and Miscellany.

COMMENCEMENTS.

University of Pennsylvania.

The Annual Commencement of the Medical and Dental Departments of the University of Pennsylvania came off at the Academy of Music on Wednesday, March 15th. At a few minutes before twelve o'clock, the trustees, faculty, alumni, and graduating classes entered upon the stage, and after "music," prayer was delivered by Rev. William H. Furness, D.D. Provost Pepper then conferred the degree of Doctor of Medicine on 122 graduates.

The degree of Doctor of Dental Surgery was then conferred on 41 graduates of the Dental Department.

Of the four prizes offered for the competition of the members of the graduating class, two were taken by Drs. Howard A. Kelly and Horace L. Jayne, conjointly. The Anomaly Prize, instituted by the late Dr. H. Lenox Hodge, and continued by Dr. Charles T. Hunter (present Demonstrator of Anatomy), was given to Doctors Kelly and Jayne, for a record of over 1200 anomalies.

The preparation prize, offered for the best preparation of some portion of the human organism, was awarded to the same gentlemen.

The "Henry C. Lea" prize to Drs. T. D. Gootald and Horace L. Jayne. Alumni Prize to Drs. G. T. Robinson and H. Will. Distinguished Merit. Drs. G. W. Johnston, C. H. Reed, H.

E. Smith, A. J. Daland, A. D. Smith, G. E. Shoemaker, C. Claxton, W. F. Hænhlen, and D. A. Randolph.

Honorable Mention—George M. Boyd, C. S. Dolley, J. L. Elliott, W. M. Gray, H. A. Kelly, C. R. Matchett, D. W. B. Rupp, C. H. Loder, McC. Radcliffe, J. Schmidt, P. N. K. Schwenk, D. W. Shelly, John E. Sheppard, J. S. Tait, W. J. Taylor.

Morgan Anatomy Prize—J. W. Blackburn, with honorable mention of William H. Steward.

Osteological Prize—E. C. Fahrney, with honorable mention of M. Howard Fussell.

In the Dental Department the following graduates received honorable mention—James H. Abrams, John A. Fothergill, Charles M. Stetson, Gabriel Oltramare, Martin H. Meisser, John G. Sharpe, Edward H. Allen, and William McNair.

In the opinion of the oldest teachers, this class was, physically, the best looking; mentally, the most vigorous; in manners, the most favorable; and professionally, the most satisfactory ever sent out from the University. Fifty-one reached averages over ninety, an attainment which has so impressed the faculty with the advantage of the higher requirements introduced, and the power of the best class of students to meet them, that next year the average will be raised to ninety-five. Out of an original class of 159, only 122 graduated, 37 being unable to meet the requirements. This year's class sent out on the invitations "*no flowers.*"

The valedictory was delivered by James Tyson, M.D., Professor of General Pathology and Morbid Anatomy. In beginning, Dr. Tyson alluded to the first annual commencement at which medical degrees were conferred in America. That occasion, he said, was the commencement, held June 21st, 1768, of the College of Philadelphia, of which the University of Pennsylvania is the direct lineal descendant and successor.

Under the old system, developed since then, a student, if he desired, could earn his degree of doctor of medicine in two courses of medical lectures of but five months' duration. All other trades and occupations required three, and even more, years—not of verbal instruction, but of actual hand labor—before the learner was considered fit to carry on his business independently of his master or teacher. This was the case with the carpenter, the stone-cutter and machinist, but the physician, who dealt with human life and its tenement, was often qualified by eighteen months' instruction, and even less.

Of the results of what is termed the "new plan," introduced in 1877, he spoke most favorably, and cited as one of the results that twenty-eight per cent. of the whole number of full course students attending the past session are college graduates. The faculty, therefore, he says, is encouraged and already committed to making the winter term of instruction hereafter six months, instead of five. "Nor will they be satisfied," says Dr. Tyson, "until an academic year is obtained of the same length as that of the collegiate department—that is, nine months—and the finished physician shall not only be thoroughly trained in all that pertains to his profession, but he shall also possess a university education, or its equivalent."

The class organization of this year's graduates was as follows: Charles R. Matchett, President; Timothy L. Barber, Vice President; George H. Wattles, Secretary; Peter M. K. Schwenk, Treasurer; Charles Claxton, Historian, together with an executive committee.

The Annual Faculty Supper was given to the graduating class on commencement night, in the new college building.

Woman's Medical College.

The Woman's Medical College of Philadelphia held its Annual Commencement at Association Hall, on Thursday, March 16th. After music and prayer by Rev. Charles G. Ames, the graduates were addressed by J. B. Walker, M.D. Professor of Practice of Medicine. He said:—

"Many of the graduates have been provided for by engagements to serve as resident physicians in large hospitals, where they will have opportunity to acquire an aptitude in the practical application of the knowledge in store. There are very few hospitals, however, which are open to women as resident physicians, and the Doctor said he was pleased to know that most of the fair graduates have mapped out an independent career, which will enable them, for a few months at least, to take up a course of study at the public clinics, which are now open to women.

"The fact is growing into popular acceptance," he said, "and admits of no refutation, that a profession which can grace man with dignity and highest honor cannot possibly be distorted into conferring disgrace and dishonor upon woman. Yet there are those who would have us believe you have soiled your hands and deformed your minds, as well as polluted your hearts, in espousing the study of medicine. Impossible. There is nothing connected with scientific inquiry which can tarnish purity or soil clean hands. It does not transform, it develops; and she who is graced with true womanliness will find it grow with the growth of her entire psychical nature under this, as under any other process of true culture."

The degree was then conferred upon nineteen graduates.

Medico-Chirurgical College.

The first annual commencement of the Medico-Chirurgical College was held at Association Hall on March 14th, and was largely attended. The exercises were begun by prayer by the Rev. George H. Johnston. Degrees were conferred by the President of the Trustees and Faculty, George P. Oliver, M.D., upon the following graduates: Parmenas Appleman, of Ohio; Thomas H. Hicks, of Canada, and Leolf Reese, of Pennsylvania. The valedictory address was delivered by Professor William F. Waugh, M.D., and a statement of the object and work of the college was read. Thirty students have now matriculated.

Starling Medical College.

The Starling Medical College, of Columbus, Ohio, at its last commencement, held February 23d, conferred diplomas upon fifty-two graduates, the largest and best class in many years.

Central College of Physicians and Surgeons of Indianapolis.

The third annual commencement of this College was held February 28th. There were eight graduates.

The Waters gold medal, for best thesis on chest diseases, a case of surgical instruments, and the valedictory honors, were all conferred on S. E. Sharp, B.S. The exercises were short, timely and interesting.

Alumni Society Meeting.

The Alumni Society of the University of Pennsylvania held its annual meeting, in Medical Hall, on the evening of March 14th, Dr. John H. Packard presiding.

Dr. James H. Hutchinson, Chairman of the Executive Committee, made this announcement: "The importance of having a literary journal under the direction of the University impressed itself upon the General Association of University Alumni, and resulted in negotiations being made and effected by which the *Penn Monthly* magazine came into the control of University men."

It was stated that the foundations of the new addition to the University Hospital, as the gift of Mr. Henry C. Gibson, were now being laid.

The following officers were elected for the ensuing year:—

President—Dr. John L. Atlee.

Vice-Presidents—Drs. Alfred Stillé, Meredith Clymer, W. S. W. Ruschenberger, Thomas J. Gallagher.

Treasurer—Dr. Thomas Holmes Cathcart.

Corresponding Secretary—Dr. H. R. Wharton.

Recording Secretary—Dr. Horace Y. Evans.

Executive Committee—Drs. Hiram Corson, Andrew Nebinger, John H. Packard, James H. Hutchinson, John Ashhurst, Jr., William F. Norris, Samuel Ashhurst, Thomas J. Yarrow, R. A. Cleeman, James Tyson, William Pepper, S. S. Stryker, Wharton Sinkler, Charles T. Hunter, C. B. Nancrede, Louis Starr, C. M. Seltzer, B. Alexander Randall, Edward S. McIlvaine, Charles R. Matchett.

Orator—Dr. Hiram Corson, of Pennsylvania.

Report of Fulton Co., N. Y., Medical Society.

The annual meeting of the Society was held at Gloversville, January 12th, 1882.

The retiring President, Dr. D. S. Orton, read an interesting paper on "Thrombosis." An essay on the subject of "Vaccination" was read by one of the members, in which the ground was taken that vaccination is and has been productive of more harm than benefit. The views of the writer were thoroughly disapproved by the Society; and its expression was in favor of vaccination and of re-vaccination every few years.

The officers elected for the ensuing year were, Dr. P. R. Furbeck, President; Dr. A. Z. Avery, Vice-President; Dr. I. de Zouche, Secretary; Dr. D. V. Still, Treasurer, and Dr. C. M. Lefler, Delegate to State Medical Society.

International Medical Congress.

It has been decided that the next International Medical Congress will be held in Copenhagen, in 1884.

A Tribute to Dr. Pancoast's Memory.

The Alumni Association of the Jefferson Medical College met March 9th, to take action upon the recent death of Professor Joseph Pancoast, M.D. Professor Gross, who presided, spoke feelingly of his relations with the deceased, whom he had known for fifty-four years, and reviewed the important medical and surgical works of Dr. Pancoast. Drs. A. Hewson and John H. Brinton also spoke, and Dr. Richard J. Dunglison offered appropriate resolutions of regret, which were adopted by the Association.

Attempted Assassination of Dr. Gray.

Dr. John P. Gray, Superintendent of the State Lunatic Asylum at Utica, New York, who was one of the principal expert witnesses in the Guiteau trial, against the insanity plea, was shot in his own private office, on the evening of March 16th, by a lunatic. The ball passed through both cheeks, but the wound is not considered fatal. The would-be murderer (who voluntarily gave himself up), Guiteau like, claimed a divine mission of eighteen months' standing, to kill Dr. Gray.

Smallpox in Bethlehem.

This disease has assumed epidemic form in Bethlehem. The health commission do not know of a single case in which a person previously successfully vaccinated has taken the smallpox. All precautions have been taken to prevent the spread of the disease.

Dr. Lamson.

Dr. Lamson, to whom we referred some time since as under arrest in London, on the charge of fatally poisoning his brother-in-law with aconitia, having been found guilty, his friends are trying to have him proved insane, from the excessive use of morphia.

——On p. 288, column 1, line 33, for *pause* read *panse*.

MARRIAGES.

BRUEN—WHELEN.—In Philadelphia, February 21st, Edward T Bruen, M.D., and Sarah Y., daughter of the late Townsend Whelen.

EDWARDS—COLLINS.—At New Haven, Conn., Tuesday, February 28th, 1882, by Rev. Noah Porter, President of Yale College, Dr. Jonathan Edwards, formerly of Troy, N. Y., and Marion, youngest daughter of the late David C. Collins.

DEATHS.

GILLAM.—In Windsor, N. C., on Friday, February 24th, 1882, Francis Gillam, M.D., in the 42d year of his age.

PARKHURST.—At Englewood, N. J., on Wednesday, March 1st, Dr. Chester Parkhurst, in the 79th year of his age.

PETTINGILL.—Lucius L. Pettingill, the only surviving son of Samuel C. Pettingill, M.D., died at Hancock, Delaware Co., New York, on Wednesday evening, February 8th, 1882, in the 40th year of his age.

VAN SLYCK.—In Brookline, Mass., February 18th, 1882, Frances Dorcas, eldest daughter of Dr. D. B. and Annie E. Van Slyck, aged 19 years, 6 months and 20 days. Interment at Oswego, N. Y.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1309.] PHILADELPHIA, APRIL 1, 1882. [Vol. XLVI.—No. 13.

Original Department.

Lecture.

SYMPTOMS AND TREATMENT OF DIPHTHERITIC PARALYSIS.

Delivered at the Hôpital des Enfants Malades,
BY M. ARCHAMBAULT,
Physician to the Hospital.
Translated for the Medical and Surgical Reporter.

Gentlemen:—We have at present in the St. Louis ward a young boy, 14 years of age, with diphtheritic paralysis, who presents most of the symptoms usually observed in the disease, and will enable me to give you a brief, yet sufficiently complete, account of this interesting affection.

This boy was admitted to the hospital on October 12th, almost at the same time with his brother and two sisters, all stricken down by diphtheria. He was discharged convalescent on November 2d, but one of his sisters succumbed. It was one of those localized epidemics where direct contagion is the principal factor in the propagation of the disease, and several members of one family are taken down almost at the same time. As for this young lad, the disease in his case was of moderate intensity, the glandular enlargement was not marked, there was no trace of albumen in the urine at any period of the malady, and he was able to leave the hospital after twenty days' sojourn.

For twenty days afterward he remained apparently well, but toward the twenty-second day his voice took on a nasal character, resembling that observed in cases where there exists perforation or division of the velum palati; a little later he had some difficulty in swallowing, particularly liquids, which returned by the nose; then, after a few days, he complained of pain about the middle of the forearm, and finally the upper limbs, particularly the left, became more and more feeble, he was awkward in using them, and was apt to let fall anything held in the hand.

Eight days since he observed that he tripped easily in walking, and that the lower limbs became feeble, particularly the left, just like the upper limbs.

Here the motor troubles do not appear to have been preceded by any alteration of tactile sensibility; the patient says that at first he had double vision, but of this there is now no trace.

At present, as you have observed in the ward, the paralysis has extended to the muscles of the thorax, for the boy can no longer sustain the weight of the head, and lifts himself in bed with great difficulty.

I will, however, examine the patient in your presence, so that you will be better able to follow the enumeration of symptoms and make the study of the case, as it were, *de visée*. You remark the nasal intonation of the voice and the difficult and indistinct articulation. He cannot blow out the cheeks by holding air in the mouth, on account of the imperfect contraction of the orbicularis oris, and also on account of the paralysis of the velum palati, which permits the air to escape by the nares. He can hardly extinguish a candle, because in the effort a considerable portion of the air escapes through the nose. The boy can no longer whistle, partly on account of the paralysis of the orbicularis oris, but especially because the floating velum palati can no longer completely obstruct the posterior opening of the nasal passage; what proves this, is the fact that

if the nose is compressed between the fingers, the boy can whistle longer, but not perfectly.

If he attempts to take a draught of water a part returns through the nose; another proof that at the moment when contraction is produced by deglutition, the velum palati is incapable of closing completely the posterior orifice of the nares, whence the reflux of liquids.

At this moment, also, a part of the same liquid should enter the larynx and induce cough, but such is not the case, and the patient informs us that this rarely happens; whence we may conclude that the occlusion of the larynx is sufficiently complete, which is not often the case in this malady, for ordinarily, each attempt at deglutition of liquids induces repeated and painful attacks of cough. The patient does not sneeze when the mucous membrane lining the nares is irritated, nor does he seem to feel the passage of liquids, an indirect proof that there is anæsthesia of these mucous surfaces. He is totally unable to gargle, for as soon as any liquid arrives in the pharynx it is either immediately swallowed or rejected through the nose, as the muscles of this region do not contract firmly and harmoniously enough to retain the liquid and agitate it in the throat, as is necessary when a gargle is used.

From this ensemble of symptoms we may conclude that there is paralysis of sensibility as well as motility; this can be seen by direct inspection, when it will be seen that the soft palate is fallen, and is but little contracted, when the patient attempts to emit the sounds ah and oh. It can also be touched with a feather, without inducing contraction, and this experiment does not produce, by reflex action, any efforts at vomiting, which would infallibly ensue if the velum palati and the surrounding mucous membrane were in the normal condition.

If, however, the feather is pushed as far as the pharynx, efforts at vomiting ensue, showing that the contact of the foreign body is felt and transmitted to the nervous centres. There exists, then, in this child, almost complete paralysis of the velum palati, affecting its sensibility and contractility; paralysis of the same nature but less advanced, of the pharynx; incomplete paralysis or notable feebleness of the orbicularis oris and buccinator.

The tongue is agitated as in general paralysis. You will notice also that there seems to be no expression to the face, that the boy has almost the aspect of an idiot, although he is very intelligent. He can smile but imperfectly; the facies is that of a statue; this condition I can only explain by the supposition that there exists paralysis, or rather, paresis of the entire muscular apparatus of the face.

If we now proceed to the examination of the limbs and thorax here is what we find:—

There is marked analgesia of the forearm, which diminishes as we mount toward the root of the limb. The patient feels the contact of different objects, and determines their temperature better over certain points. We find, then, in general, that there is diminution of tactile sensibility more marked over the parts where the patient first complained of pain. For the lower limbs the sensory troubles appear, as in the upper, more marked toward the extremities, but irregularly distributed; that is, tactile sensibility is completely gone at one point while it is normal just beside it.

The pressure of the hand is very feeble, particularly with the left, and he can lift nothing of any weight. It is probable that the dynamometer would show a notable diminution in the force of muscular contractility, as has been shown by Trousseau. But what is not less remarkable is the default in precision of muscular contractions; the hands are shaking and agitated, as in general paralysis, and the patient can hardly take up any small object. He can take with ease a tumbler, but he has great difficulty in controlling the motions of the fingers and bringing them together with sufficient precision to pick up a pin from the table. There exists, then, very marked paresis, and, as it appears to me, a certain degree of incoördination of movement.

For the inferior limbs the motor troubles are yet more marked, or, at least, more evident. The patient can sustain himself on his limbs if he has something to lean on, but if he attempts to walk, he trembles and stumbles, and would certainly fall if not held up. The left leg drags, and is manifestly feebler than the right, so that though this state of paresis seems almost generalized, there yet exists a certain degree of hemiplegia, which would lead us to admit that if there is, as I believe, any material lesion of the nerve centres, it would predominate on the right side if cerebral, on the left side if below the crossing of the pyramids.

There is some incoördination of movement, the patient throwing his limbs about, as in ataxia; he does not well feel the ground under his feet, and walks better when he can follow the motions of the limbs with his eyes. It is certain that the diminution of sensibility and the enfeebled sense of muscular contraction are very important factors in producing these paralytic manifesta-

tions, for when the patient is lying down considerable effort is necessary to flex the limb or to extend it when flexed.

This incomplete paralysis is generalized; all the muscles of the thorax, even, seem affected; it is with difficulty that the boy lifts his head from the pillow, and it is only after great efforts, and rolling from right to left, that he can manage to place himself in a sitting posture in the bed.

The muscles of organic life do not appear to be affected; the patient has been extremely constipated, and there may, perhaps, exist some degree of paralytic inertia of the intestines. The upper eyelids are somewhat fallen, but as there exists granular conjunctivitis, this may explain the incomplete blepharoptosis. The pupil is not dilated, and ophthalmoscopic examination reveals no alteration of the interior of the eye.

There is no trace of albumen in the urine, and there never has been, even during the course of the primary malady.

The symptoms observed in this case are sufficiently typical to give you a complete idea of the malady, and we will now be able to consider the proper course of treatment.

Treatment.—Attention must first be paid to the general health, for such patients are usually in a state of profound anæmia when convalescent from a more or less intense attack of diphtheria, as you must have often remarked in the wards of this hospital. They are pale and feeble, and you will generally find a blowing murmur in the cervical vessels. And this anæmic condition is generally more marked in cases where paralysis follows diphtheria, so that I am in the habit of giving the muriated tincture of iron to such patients, in doses of from five to fifteen drops. In conjunction with iron, I have found the arsenical preparations of great advantage. The preparation most frequently employed in this hospital is the liquor potassii arsenitis, or Fowler's solution, of which the dose may be carried, without difficulty and gradually, to ten or twelve drops per diem, for a child of from five to eight years of age. The two medicaments may be given conjointly at meal times, in a little wine.

As you can well understand, the syrup of the iodide of iron and the ferruginous elixir of M. Rabuteau also answer all the indications for treatment. I also administer during the day, by dessertspoonfuls, a brandy mixture containing thirty grains of extract of quinquina (Fr. codex), and eight or ten minims of tincture of nux vomica. If the tincture induces vomiting, it may be necessary to omit it, or it may be advantageously replaced by some preparation containing sulphate of strychnia, such as the syrup of the French codex, which contains $\frac{1}{12}\frac{1}{0}$ of a grain in one teaspoonful, and is easily taken and well supported by the stomach. At the same time the more generous wines may be allowed.

When the paralysis is generalized, I make use of the continuous electric current, placing the positive pole over the cervical region and the negative at the lower part of the vertebral column, or on one of the limbs.

M. Trouvé has constructed small electric machines of six elements, which are not above the means of most families, and nothing is more simple than to instruct some one about the patient in the use of this little apparatus.

These continuous currents may be maintained for hours if but four elements are used; when six are employed the machine should not be left so long in action. It has seemed to me that in cases where the paralysis was very marked this means of treatment proved of great utility.

When I consider that the diaphragm is enfeebled, I make use of electricity, so that the current will traverse that muscle; and in the same way when there is paralysis of the intrinsic muscles of the larynx. In order to act on the nerve extremities, and, consequently, on the paralysis, dry friction or massage should be made over the entire body, with the hand simply covered with a glove or with a soft woolen brush; frictions with a horse-hair glove are much too rude. The woolen glove used for the frictions may often, with advantage, be first wetted in some alcoholic solution; in such case the massage produces a sensation of cold, which is soon followed by general reaction, which much invigorates the patient.

Or a large flannel gown may be made so as to fasten about the child's neck, and he may then be subjected to a species of vapor bath, gum benzoin or juniper berries being burned on a small brazier placed so that the fumes mount under the gown; while this is going on the little patient can be vigorously rubbed through the flannel. This cannot be done at the hospital, and we are obliged to content ourselves with salt water and other baths. When recovery is slow and the season permits, nothing is more apt to hasten it than a sojourn at the seaside, with sea bathing.

When paralysis of the pharynx induces pronounced dysphagia, it should receive most careful attention from the physician, particularly if tracheotomy has been performed and the wound in the throat is still open. Remembering that compact substances are most easily swallowed,

thick soups and macaroni cooked in milk may be given, and drinks may be administered slowly with a spoon. If the wound in the trachea is still open, it will be necessary to occlude the orifice while the child drinks, for deglutition is easier where this is done. But the children are often completely spent by fruitless endeavors to satisfy their thirst, and also fatigued by the constant fits of coughing at each attempt to swallow, so that they finally refuse all species of liquid, and there is great difficulty to introduce sufficient food to keep them alive. In such cases very thick soups may be given, which are at the same time an aliment and a drink. These may be thickened with the different lichens, Irish moss, etc., or with gelatine.

When the patient can swallow nothing, it becomes necessary to introduce food by means of the œsophageal tube, which is not always easy to pass in children. The soft rubber œsophageal tube, such as is made at present, should be used so as to avoid all chances of injuring the soft parts. Concurrently with these means of sustaining the system, analeptic enemata, particularly those compounded with the different peptones, are of very great benefit. Such an enema may be made up as follows:—

℞. Salep, gr. xxx
Thin beef soup, without salt, ℥ ivss
Yolk of egg, No. j or ij. M.

By means of an electric current passing by the larynx, deglutition has been facilitated, and the contractility of the intrinsic muscles of the larynx awakened. The paralysis of the diaphragm should be combated with perseverance, by means of the electric current, and this paralysis should receive special attention, as it is one of the direct causes of death.

Strabismus and blepharoptosis should also be treated by electricity, but here there is less urgency, as these are of little importance, and always finally disappear. The visual troubles induced by the default in accommodation are corrected by a collyrium containing eserine:—

℞. Sulphate of eserine, gr. v
Aquæ destil., f℥ j. M.

A few drops in the eye, morning and evening.

Here again there is little need of therapeutic intervention, for the visual troubles are always fugacious and disappear completely after a certain length of time.

—The Paris Académie des Sciences has awarded the Grand Prix Lecaze, of the value of $2000, to Professor Brown-Sequard, as a reward for a lifetime devoted to physiological research.

Communications.

THE EPIDEMIC OF RÖTHELN IN SUMTER CO., ALABAMA, IN 1880.

BY EDWARD H. SHOLL, M.D.,
Of Gainesville, Ala.

From the Alabama State Medical Transactions of 1881.

Having found it impracticable, after careful inquiry, to definitely fix any facts in reference to the time and place when this disease first made its appearance in Sumter county, it may be well to state in the outset that the portrayal of the disease herewith given is drawn from personal observation and tangible practical experience.

The first case seen was in April, 1880, the last one three days since, February 15th, 1881. Through all those ten months there has been more or less of it, quiescent sometimes for two months, then breaking out afresh some miles away, without any direct contact, that could be ascertained, with the previous case.

Definition.—An eruptive disease of specific character, distinct, separate, of its own kind, and contagious, ushered in by three to four days of discomfort from excess of tears, inflamed eyes, and irritation of nostrils and throat, and greater or less heat of skin.

On the third or fourth day the eruption appears, pinkish, pointed, projecting at first, but in a few hours deepening in its reddish color, and passing from the point to the crescent, and then to irregular shaped and slightly elevated patches of a size varying, according to the severity of the disease, from half to one and a half inches in diameter, lasting from three to ten days, transmissible from the pregnant mother of seven months to her unborn child, and developed in a few days, as I have seen it, after the birth of the child. It is followed by desquamation, which sometimes protracts itself for forty to fifty days.

Pathology.—It is right and in accordance with diseased conditions of the system, that this disease, as specific and distinct in its being and kind, should be remanded to its proper place, and hold it as an entity, a unity in cause, course, result, of its kind, and its own kind, no hybrid, and I would here assign it to its true place in the records of disease, as one and only one in all its various grades, times, places and surroundings.

This I do with all deference to the German, English and Scotch authorities who have written on the subject, for close observation and experience have taught me that time, place and circumstance may modify or give a peculiar livery to a disease, but never blend it into oneness with

another, by which it shall merge its own type, and assume the distinct elements and potentialities of a new disease, as the child, who may intermingle the pronounced features and individualities of its two parents.

In the Cincinnati *Medical News*, of April, 1876, Dr. A. J. Miles gives four reasons for assigning it a place as a distinct disease. The claim that I shall lay for its individuality is based upon a study of the disease in my own person, lasting, from its inception, in May, to the last distinct evidence of peeling, for sixty days, during all which time I watched its varying manifestations with a precision that cannot possibly be accorded to the observer of any disease in another person, for the sense of constant companionship with and service to the disease ceases only during the hours of sleep.

Symptoms.—First, a sense of languor and general discomfort, with depression of spirits, followed in a few hours by shiverings, with slight reduction of heat of skin, which in a few hours rises above the normal standard, attended by red and watery eyes, sneezing, frontal pain, sore throat, constriction of chest, nausea, pain in the back and limbs, with increased frequency of the pulse, and drowsiness, incident to a want of proper decarbonization of the blood, this attributable in its turn to the blood poison and the want of proper aeration of the blood in the lungs already embarrassed by the bronchial trouble.

In my own and all the cases noted, mild or severe in type, the sore throat was the most prominent and distressing symptom. In from seventy-two to ninety-six hours from the first invasion, the eruption, in deep pinkish and distinct points, makes its appearance, first on the face, neck and arms alone, in others gradually covering the whole body, deepening in shade and coalescing in bulk, until it passes in color from a pinkish to a crimson and almost coppery shade, and in form to irregular shaped and elevated patches. These, in every case noticed, followed the order of single points, or a number of points gradually commingling into a concentric shape, as in measles, and lastly into masses of irregular conformity and size.

In my own and other cases of moderate severity, the duration of the eruption, well-marked and defined, was ten days, from which time it gradually disappeared, but could be seen at any time for twenty days thereafter, when the body was relaxed by vigorous exercise on a hot day. During the first four days of the eruption the symptoms are all aggravated, and the amount of discomfort and suffering is vastly beyond what the frequency of the pulse or heat of skin would seem to indicate. The headache is now more pronounced, pain sharp, darting, and most severe above the eyes, rendering it at times, apart from the weak and irritated eyes, almost impossible to hold the eyes open. There is intolerance of light, lids are tumid, lachrymation is increased. The sense of constriction of the chest grows apace, and is annoying, requiring occasional deep inspirations for relief, sometimes accompanied with severe paroxysms of coughing, which, at first dry and husky, are gradually relieved by a moderately free expectoration of frothy mucus. Nausea is a common symptom. Seldom, however, do we have vomiting, except in the effort to clear the throat of the tenacious secretion.

Of all the symptoms, the sore throat is the most constantly present, and is distressing even in some of the mildest cases. It presents a swollen appearance. It varies in color, from a fiery and deep crimson to a livid purple, is intensely congested, with tonsils much enlarged. The effort at swallowing now becomes difficult. A constant secretion of tenacious and tough mucus requires a like almost constant effort to dislodge it, and compels the sufferer to maintain the erect or prone position. Sometimes there is a considerable external swelling. The voice becomes hoarse, husky, and is almost lost. Talking becomes painful, and in the attempt to swallow, which at times is well nigh impossible, there is a forcing back of fluid through the nose, and impending suffocation seems to threaten. In a class of cases more aggravated than I have seen, the increase of a vitiated mucus goes on, the cough becomes constant, the powers of life give way, and the patient dies by suffocation, convulsions, or coma.

No one who has not suffered with the sore throat of this disease can form any suitable idea of its distressingly annoying and painful character, allied as it is with the teasing cough. Wearied with constant effort, unable and afraid to sleep, for fear of suffocation, the sick man turns and tosses, wishes in the morning for night, in the night for morning, and if he steals a moment of rest, wakes from dreams of horror to a reality of misery.

From the fourth to the fifth day after the appearance of the eruption, the symptoms, in case of returning convalescence, begin to decline, and at the expiration of ten days a sense of discomfort and debility alone is left.

I have given the type of a case of ordinary severity. It shades off into light or darkness,

as the attack is less or more severe Some symptoms are absent in mild cases, but the sore throat is present in them all. In my own case no eruption could be found at any stage, save on the face, neck and hands. The temperature range is from 99.3° to 103°. The first was uniform with me for three days of the eruption. The pulse was from 84 to 120. The tongue is ordinarily but slightly coated, is red on tip and edges, with a constant craving for acid drinks, which desire was freely satisfied with lemonade and buttermilk.

The decline of the disease was accompanied with a profuse watery diarrhœa, of a pale yellow color, discharges in thirty-six hours relieving the throat, cough and itching of the skin.

About the twelfth day from the appearance of the eruption, desquamation began and continued for forty-eight days, at the end of which time the last peeling from the hands took place. From the throat and on portions of the face the shedding was by branny scales and rolls. From the hands the process went on slowly by a literal peeling, the inner part of the hand, wherever commonly subjected to pressure, turning a deep saffron yellow prior to the shedding. On the sole of the foot the peeling was confined to the toes; the rest of the foot shed itself in scales.

During the whole period of desquamation I was never well, and though attending to my ordinary duties, did it carrying weight, mind and body alike sluggish, appetite and digestion indifferent, with frequent headaches, and more than ordinarily copious secretion of limpid urine, which, in the morning particularly, scalded the urethra in its passage, and had at times a distinctly ammoniacal odor.

Fortunately, I cannot give any of the anatomical lesions from practical observation. They will be inferred from the nature of the disease, and will be found in the throat, lungs and kidneys.

Diagnosis.—In the initial stage it may be readily separated from scarlet fever by the duration of the premonitory symptoms prior to the appearance of the eruption, as in scarlet fever it is, in the great majority of cases, but twenty-four hours after the premonitory chill before the eruption appears. In this disease it is not seen until the third and fourth days. From measles, it is best distinguished by the almost constant and inevitable attendance of sore throat from the beginning. The eruption appears at first in small points, pinkish, lacking the deep red of scarlet fever, and less diffuse, coalescing afterwards in various sized and somewhat elevated patches, becoming a dark red, which, in fading out, assumes sometimes almost a coppery appearance, and generally not as completely diffused in its character as measles. The duration of the eruption in rötheln, in a case of any severity, is longer than in scarlet fever or measles.

The constant accompaniment of a sore throat, severe in its character beyond other manifestations, defines a sharper element of difference from scarlet fever and measles than any other symptom of the disease, as even in scarlet fever, in mild cases, the soreness of the throat is but little complained of, and in measles is not commonly found.

A peculiar feature of the throat trouble, in cases of any gravity, is the great enlargement of the tonsils, and this, too, out of proportion to other evidences of disease, aggravated, when it goes to this length, by a more or less severe bronchial trouble. The tongue is generally red, with a thin, solid, yellowish or brownish coating, differing from the white-coated and red-pointed tongue of scarlet fever.

In rötheln the pulse is less frequent by far than in scarlet fever of like grade, and ordinarily less than in measles; neither is the temperature as high, for in a limited observation I have never found the temperature to exceed 103°.

The process of desquamation is much as in scarlet fever, though of longer duration, and the scales are not so large, being mostly of a fine branny character, save on the hands and feet.

Cause and Propagation.—What atmospheric and terrene conditions are needful to the development of this disease has not yet been satisfactorily determined, as but few months have elapsed since it first made its appearance in Sumter county, never having been seen before this year, 1880, by any of the physicians now practicing in the county. At the time of its first appearance with us, about the early part of April, there had been a continuous rain-fall, not so excessive in quantity, but constant, with a thermometer higher than the average. We have here the two factors of heat and moisture present on its first appearance, and prolonged for a sufficient number of weeks to delay the usual farm work.

No traceable history of contagion could, with the greatest care of investigation, be found in the first two cases that made their appearance. Those that followed were propagated by the subtle element of contagion, the period of incubation being from five to twelve days. The disease is less contagious than measles or scarlet fever, and has no objective point in its selection

of tenants, affecting white and black alike, with the same general course of symptoms and after consequences.

Treatment.—In mild cases but little medication is needed. In order to meet the throat trouble, give an adult one tablespoonful of a saturated solution of chlorate of potash every three hours, acidulated with ten drops of tincture of iron. In connection with this, three to five grains of sulphate of cinchonidia or quinine may be given every eight hours, as an antipyretic and antiseptic. I have also prescribed with the quinine or cinchonidia, omitting the potash and iron, the sulphite of soda as an anti-zymotic, every three hours, in thirty grain doses, dissolved in sufficient water, reducing the dose if it purges too freely.

In every case, infant or adult, where the secretion of tenacious mucus became constant and distressing, and where the tonsils were enlarged and made swallowing and respiration difficult, I used, in connection with the above specified treatment, the prescription of Dr. Pritzinger, of Pennsylvania, for tonsillitis, which, for many years, and in hundreds of cases, I have employed with the same confidence of breaking up a tonsillitis in its formative stage as I have of averting a malarial chill with the preparations of Peruvian bark, as follows:—

℞.	Potassii chlorat. pulv.,	gr. lx	
	Spt. æther. nit.,	ʒiv	
	Tinct. guaiac.,	ʒxij.	M.

Sig.—Dose for adult, teaspoonful, undiluted, every three hours. Shake well. In properly reduced proportion for children and infants. Follow each dose with a few swallows of water.

Beyond this, nothing suggests itself in the management of the general run of cases. Peculiar conditions are to be met as they arise. The nourishment during the height of the disease must necessarily be in liquid form, milk and soup, as the difficulty of swallowing renders solid nourishment inadvisable. It is well to be suitably clothed, to avoid draughts, and during the period of desquamation, to abstain from any unusual causes of stimulation, excitement and fatigue, as there is danger of crippling the kidneys in their work of eliminating the waste of the system.

In rötheln, as in all diseases of its class, the physician must watch his cases closely, and drive his medication, with ready hand, well up to all the requirements. By so doing, the very large proportion of his cases will run their due course to convalescence, and after complications will be avoided.

A PLEA FOR A MEDICAL AID ASSOCIATION.

BY FRED. HORNER, M.D.,

Of Salem, Va.

In the number of the Medical and Surgical Reporter for October 14th, 1876, the question of the organization of an American Medical Brotherhood was briefly discussed and commended; that this subject has during the interval engaged the attention of the profession, the following facts will show.

In 1876, under the auspices of the Philadelphia County Medical Society, an Auxiliary Aid Society was founded, and has been nobly sustained by the efforts of Drs. H. H Smith, Benj. Lee and W. R. D. Blackwood. Ere long this Society will have a handsome and permanent fund, the profits of which promise to secure a respectable amount for distribution to the families of deceased members. The profession in the city of New York have also undertaken a like philanthropic work. Dr. James Anderson is the founder of this society. In the 12th annual report, the president, Dr. Blumenthal, states the permanent fund to be $6254.55, which is deposited in the best saving bank of the city. Since its organization $20,000 has been distributed for the benefit of the widow and orphan. Dr. Blumenthal adds, in his late report, "The amount of comfort conferred and grief and sorrow assuaged by this sum, surely no figures can adequately express." The State Medical Society of Virginia has given its cordial support towards the completion of a Medical Aid Association, whose aim shall be "to obviate the more expensive methods of life insurance, and to assure prompt assistance to the unfortunate, especially to those who have neglected, or are unable to incur the expense of regular insurance." The Mutual Benefit Association of Kentucky, originally undertaken by prominent physicians of that State, requires an admission fee of $10, and the payment of an annual fee of $2, which secures to the family of a deceased member $2500, or to one sick $5 per week, for serious illness or accident. The writer has sought, by correspondence with brother physicians, to elicit from them an expression of opinion on the practicability of an Aid Association for the benefit of the profession of this country. They will pardon the liberty which is herewith assumed, to quote from their letters.

The late President of the American Medical Association, Dr. John Hodgen, of St. Louis, says: "I shall at all times and on all occasions

be pleased to do anything in my power to aid the widows and orphans of deceased members of our profession."

Professor L. A. Sayre: "It is a noble object, and deserves the favorable consideration of every man in the profession. The plan has worked admirably in this city, and would be very good to model after."

Professor N. S. Davis: "The object in view is a good one. Many years since I advocated such an organization, and bestowed upon the matter some thought."

Dr. Blackwood: "We are fully in accord with the effort to establish both a State and National Medical Aid Society. It only requires concentration, to get the matter under way."

Dr. Wendel, Murfreesboro, Tenn.: "Right here in this town we have an instance of an excellent physician who, after forty years' practice, died, and his children are left penniless, and his widow's home was sold last week."

G. B. Thornton, President of the Board of Health, Memphis, Tenn.: "Had not the noble and generous physicians of the city of New York sent us money, during the pestilence of yellow fever in this city, many families of physicians who died would have suffered deplorable want."

Dr. James Anderson, of New York: "Our Association has been of great comfort to many a widow. Yea, and four of the members of it, one a Professor, and one who drove two horses. This Association excites sympathy and affection."

Shall it be deemed extravagant and premature, on the testimony above produced of its acceptance by prominent physicians of various sections of this country, and in view of the fact that in Metropolitan cities, and in several States of the Union, the medical societies have considered the question to be eminently practical, to urge upon the attention of the members of the American Medical Association, possessed as they are of wealth and influence, to make it one for their consideration, and to give their moral support to such an undertaking? It is a matter of surprise that during the long and eventful career of the National Association, during which time they have contributed to the attainment of a high standard of medical education, and annually conferred upon plans for the relief of their fellowmen, and have saved hundreds of lives, they have failed to devise any plan of a benevolent character for the relief of their medical brethren, who furnish no exception to the accidents, financial distress and ills referable to the chances of human life. The creation of a Section of Benevolence would help to accomplish this result. In the words of the gifted Atlee, "Our profession should ever seek, along with the advancement of medical lore, to promote every system of benevolence and humanity." It was asserted, with truth, on the occasion of the late meeting of the Sanitary Association at New Orleans, that "the legislatures of the several States of our Union leave no doubt that every child among us inherits the right to an education, the right to proper food, clothing and shelter." Will physicians in this land practically deny these rights to the families of their brethren? Should we not seek to dispense our own charities and to control the funds raised, rather than commit them to corporations which tax the policy-holder, and after all, may fail?

Physicians who will contribute of their abundance, toward a Medical Aid Association, with the generosity which marks the lives of thousands, north, south, east, and west, of other callings and professions, will thereby rear to themselves, in the hearts of a grateful posterity,

"Monumentum aere perennius
Regalique situ pyramidum altius."

CARIES OF THE CUBOID—REMOVAL OF THE DISEASED BONE AND RECOVERY.

BY REUBEN A. VANCE, M.D.,
Professor of Operative and Clinical Surgery in the Medical Department of Wooster University, Cleveland, Ohio.

The following case came under my care in 1873, and was operated upon in 1874. The simple character of the measure adopted for the relief of this patient will serve to show that such cases can be radically cured by other operative procedures than those which require the sacrifice of either the foot or leg.

Miss L. S., aged twenty-one, was injured on the outside of the right foot, in 1871, by the fall of a flat-iron. For several days the foot was swollen and tender, but by the end of a month the part seemed entirely well. Nothing further was noticed until some time in 1872, when, after dancing late one night, a violent pain located itself at the site of the injury. If the patient used her foot in any way, this pain became more intense; rest, with elevation of the part, alone secured a mitigation of her sufferings. The foot slowly enlarged; abscesses formed above and on the outside of the part, and were converted into permanent sinuses. As time passed the acute character of the symptoms disappeared, and the part could be moved without uneasiness; if the patient placed her foot on the floor and bore any weight upon it, a sickening, rather than severe

pain was evoked, which persisted for hours. This pain recurred at night—seemingly provoked by unconscious movements in sleep—and was the chief complaint of the patient. There were two openings upon the top of the foot, and two upon its outer side. By passing a probe into these sinuses it was discovered that they all led to the outer and lower side of the tarsus, in the immediate region of the cuboid. Three out of the four canals could be demonstrated to communicate with carious bone ; in the fourth sinus —situated just in front of the outer malleolus—the probe could not be made to reach the bone. At its largest point the right foot measured two and one-fourth inches more in circumference than the corresponding part of the left. An attempt to bear the weight of the body on the right foot excited pain ; pressure over the cuboid likewise did so; other movements of the part, which involved no direct compression of the region of the cuboid, were painless. There were no evidences of either pulmonary or cardiac disease in this patient ; no hereditary tendency to strumous or rheumatic affections ; and as the patient was anxious to get well, I advised an operation for the removal of the diseased bone. To this measure the patient and her friends finally assented, and the operation was performed October 24th, 1874. After the patient was anæsthetized an incision from the base of the fifth metatarsal bone to the anterior border of the outer malleolus was connected with one running from the base of the fifth metatarsal two inches inward and forward. When the flap thus formed was reflected, the sinuses could be traced to their origin in the carious cuboid. At this point the only real difficulty in the operation was encountered ; this arose from lack of proper appliances to seize and retract the tendons of the peroneus longus and peroneus brevis. Dr. Needham finally succeeded in holding them out of the way while I onnected the openings in the periosteum and exposed the carious bone ; this accomplished, the substance of the cuboid was broken up and extracted piecemeal, its periosteum and ligaments alone remaining. A careful examination of adjacent parts showed the disease to be limited to the cuboid. After the carious bone was removed the tendons of the peronei were returned to their original situation, drainage tubes were inserted and the foot and ankle were fixed in a plaster-of-paris splint. An opening at the most dependent portion of the wound permitted free drainage and enabled the attendants to wash out the latter with a solution of carbolic acid—one to fifty—without disturbing the immovable apparatus in which foot and ankle were embedded. Six weeks elapsed before the plaster splint was removed ; at the end of that period the site of the excised cuboid was occupied by a mass of adventitious tissue, and although the wound was not completely cicatrized, yet the cavity was filled and the granulations at the surface were healthy. The foot and ankle were again rendered immovable, but the patient was permitted free exercise on crutches ; by the end of a fortnight the wound had healed.

In July, 1880, I saw this patient and made a careful examination of the foot. The right foot measured the same as the left ; within an eighth of an inch of absolute equality in every measurement. She says that since her marriage she has done all her own housework, with the exception of a month before and a month after the birth of her child. The latter was born in 1879, nearly three years after marriage. While carrying this child she was annoyed by occasional pains in the tarsus. There was also some irritability of the scar a short time prior to her delivery. At this time her husband wrote me a very full and precise account of her symptoms, and, with the impression that the congestion of the lower extremities incident to the latter stages of pregnancy was the cause of the pains, I advised her to give up her domestic duties and keep the recumbent posture as much as possible. She assured me that so long as she complied with this advice she suffered but little pain ; the latter, however, left her permanently with the birth of her child.

The foregoing case illustrates the simple measures that occasionally suffice for the cure of certain forms of caries of the tarsus. In connection with others that have been operated upon by the writer, the clinical features of this patient's history might serve to illustrate certain phases of modern surgical practice in dealing with diseases and injuries of the human foot. Notwithstanding the readiness with which this carious bone was excised, and the speed with which the patient recovered, the friends of the latter were assured, by respectable surgical authority, that any operation short of amputation was mere reckless experimentation ; that blood-poisoning would surely supervene if the dead bone were gouged out, and that no surgeon with an established reputation would advise any other measure than amputation.

—In Sweden and Denmark, sheep's milk is generally used : in Switzertand, goat's milk ; in Lapland, reindeer's milk ; and in Tartary mare's milk.

Hospital Reports.

WESTERN PENNSYLVANIA HOSPITAL.

SERVICE OF W. H. DALY, M.D.

Reported by George W. Hiett, M.D., Resident.

Two Cases of Typhoid Fever—No. 1. Peritonitis, Abscess of Liver, Pneumonia, Death, Post-mortem Examination. No. 2. Abscess of the Neck—Recovery.

Joseph E., admitted November, 1881, aged twenty-four, single, laborer, born in Switzerland; has been in this country but a short time; does not speak English (no family history; no previous sickness or injury); has always been strong and well, until the present illness.

October 30th, 1881, patient was taken sick, suffering from frequent diarrhœa, pain in the abdomen; this being the most prominent in right iliac region; loss of appetite, with considerable pain in the back and shoulders. Preceding this he suffered from minor ailments for a brief period; was able to be about, but quite disqualified for active duty. When admitted was very weak, requiring assistance of nurses to be conveyed to the ward; medium height, well developed, light complexion, skin smooth, no sudamina, or typhoid fever spots, belly not tympanitic, tongue coated, not very dry. Patient would speak when addressed by an interpreter, but seemed more or less reticent and stupefied. Was nervous, with slight twitching of the muscles. Pulse 92. Temperature, taken in the axilla at 7 P.M., 103⅘°.

Ordered the iodine mixture—

℞.		
	Potassii iodid.,	℈ iv
	Iodinii,	gr. x
	Glycerinæ,	f℥ ss
	Aquæ,	f℥ ss. M.

gtt. v in tablespoonful of water every three hours. The diet was restricted to a moderate quantity of beef tea and milk, given at regular intervals.

November 2d, patient rested well during the night; had one stool, which was examined and found to be of liquid consistence, and of a light brown color, tinged with yellow.

During the next five days temperature did not rise above 103°, and the lowest record was 100½°, till morning of the 7th, when it fell to 100°. In the evening the temperature rose 2⅘°, and at 8 P.M. about half a pint of clotted blood was discharged from the bowel, which floated in a thin, bloody fluid, nearly a pint in quantity. Administered gallic and tannic acid, āā, gr. x, and kept the patient absolutely quiet, on his back, in bed. 11 P.M., had another larger hemorrhage from the bowel, probably, two-thirds of a pint of clots. Belly not tympanitic, pulse feeble, not very rapid, and quite distinct. Ordered gtt. xxx, oil of erigeron, in emulsion, the dose to be repeated in two hours.

At 6 A.M., 8th instant, and at 3 P.M., there was a recurrence of the hemorrhage, but at each time very slight. After each attack a small dose of oil of erigeron was given. Morning temperature 97⅘°, pulse 104°, quite feeble. Gave milk punch f℥ j, every hour, till four ounces were taken, the patient getting in this amount f℥ j of whisky.

Prior to setting in of hemorrhage, on the 7th, the stools numbered from one to four in the twenty-four hours. They contained no trace of blood; were in character like the one described above. Temperature arose in the evening to 101⅘°.

November 9th. No recurrence of hemorrhage; circulation improved; temperature 101°; ordered milk punch, given every three hours—f℥ j. Prescribed carbonate of ammonia, gr. iij, and quinine gr. ij, in emulsion, every three hours, the iodine mixture being discontinued the 7th inst. Patient had a cough, which was not a very prominent symptom, and there was no lung trouble present, except a slight bronchitis. Evening temperature 103°, pulse 95.

Nov. 10th.	Temperature	100½°	; pulse	88 M.
" "	"	102⅘°	; "	91 E.
" 11th.	"	98½°	; "	78 M.
" "	"	100⅘°	; "	86 E.
" 12th.	"	98°	"	80 M.

At this date bowels were moved for the first time since the 8th inst; stools contained no blood; patient very anæmic, but taking a good quantity of nourishment.

November 13th, 5 A.M. Hemorrhage again occurred; several small clots being discharged from the bowel with the stool; administered a single dose of the oil of erigeron. 9 P.M. a recurrence of the bleeding ensued, and in larger amount than at morning. Ordered gtt. xxx of the oil of erigeron, every hour, until four doses were taken. Instructed nurse to keep patient absolutely quiet, on his back, in bed; pulse not rapid, but regular and small; belly flat; tongue coated, but not dry; features pale, with sweat standing on the forehead; skin and extremities moderately warm. From this time to the 16th, inclusive, patient had one evacuation of the bowel daily, the passages resembling the usual typhoid fever stool, and presented no trace of blood.

Up to the 22d patient's condition had apparently changed for the better. There had been no hemorrhage since the 13th; he had gathered strength; a usual quantity of nourishment had been taken, and was well borne by the stomach. Plenty of sleep aided materially in restoring the vital functions. Just now, however, the diarrhœa became a troublesome symptom, the passages increasing in number from two in the twenty-four hours to five or six during the same interval. No blood was present in any of these evacuations.

November 27th. Diarrhœa continued unabated and at times became much worse; the passages, numbering from eight to twelve in the twenty-four hours, were watery and of a dirty green color. Prescribed chalk mixture with paregoric and tincture of kino.

November 29th. After repeated doses of the above drugs, as well as a resort to other remedies, the stools still continued frequent and copious. Patient gradually growing weaker, and complained of considerable abdominal pain.

December 2d. Pulse small and frequent; marked abdominal tenderness with slight tympanites; vomiting at frequent intervals; diarrhœa still profuse.

Examination of chest anteriorly revealed no abnormal condition, save increase in frequency

of the breathing. Patient too feeble to be raised up or turned from side to side in bed, and an examination of posterior region of chest was not made.

The temperature went up, on the morning of December 1st, from 101⅕° on previous evening to 103⅘, pulse 140, this temperature being one degree higher than at any previous time since admission. The morning temperature of December 2d was 101⅖; the previous evening it had declined to 101⅘, and on the evening of the 2d, it continued to fall, the thermometer registering 99¾°. Ordered a turpentine stupe applied to the belly and the administration of food per enema for twenty-four hours.

December 3d. Very rapid breathing, small, feeble pulse, extremities cold, features presenting a dusky hue. Patient evidently fast sinking. Morning temperature 103½°, pulse 144. Discontinued all medicines, and endeavored, as far as possible, to relieve the sufferings of patient, until death should supervene. This occurred at 4 P.M.

Post-mortem examination, eighteen hours after death. Body greatly emaciated, skin somewhat discolored, lips cyanosed, abdomen distended, rigor mortis slightly marked, eyes and cheeks deeply sunken. Peritoneal cavity contained pus; intestines distended with gas and bathed in the purulent fluid; their walls intensely congested at various points, thickened and softened, presenting evidence of previously existing inflammation. In the small intestine there was no ulceration of Peyer's glands and no appearance of ulceration in the mucous membrane of the gut throughout its entire extent. Large intestine bound fast at several points by bands of adhesion. No perforations observed. Extensive and deep ulceration of this gut, from the anus to the ilio-cæcal valve, the latter being also involved. Some of these ulcers were transverse, some longitudinal, some round, and all of them deep; in size varying from half an inch to two inches in their greatest dimension. The cæcum and the ascending colon presented most extensive evidence of disease, but the ulcers were very numerous in the rectum and every other portion of the gut. Some had their edges rounded and sloping, denoting a tendency to heal, others presented ragged and deep margins, indicating total failure in the reparative processes. The quantity of fluid in peritoneal cavity not large, probably half a pint. Liver slightly enlarged and adherent to the diaphragm, its convex surface covered with pus. Gall cyst moderately filled with bile. External to it on the concave surface of the liver, and near its anterior edge, was a pus secreting surface about one inch and a half in diameter. This diseased area was deeply cupped and discharged its pus into the peritoneal cavity. A perpendicular section through the organ at this point disclosed the presence of a large abscess area of a more or less rounded form, and measuring three inches in diameter. In appearance it was a grayish, cheesy, friable mass, its border sharply defined from the surrounding normal liver substance. The mass of abscess occupied the anterior portion of the right lobe. Repeated section of the organ failed to reveal other points of suppuration or of deposit. Spleen enlarged and congested, only moderately softened. Kidneys slightly softened, the capsules adherent at certain points. Neither the spleen nor the kidneys contained points of abscess.

Left lung grown fast to the diaphragm and pericardium, with a few bands of adhesions connecting the outer lower portion of the lung with the chest wall. The lower lobe and the posterior inferior portion of the upper lobe were engorged, blue on the surface, heavy, the fissure obliterated by adhesions. Apex and anterior margin of lung intact. No evidence of tubercle. From the cut surface of the engorged portion no blood exuded, but a dirty brown non-aerated fluid could be expressed. A cube of this tissue thrown into water displaced its own bulk of liquid and floated beneath the surface. Early stage of acute lobar pneumonia. Right lung presents similar lesions, but less in extent, only the lower lobe being involved, and the adhesions between its base and diaphragm less firm than upon the left side. The fissures were not obliterated by bands of adhesion.

Pericardium contained above the normal quantity of fluid, and did not present evidence of previous inflammation. Left ventricle firmly contracted. Valves normal, but patulous, the auriculo-ventricular openings being filled with ante-mortem clots, which were firm and projected into ventricle and auricle.

The patient's death was caused by exhaustion consequent upon the extensive peritonitis, and latterly upon the sudden development of pneumonia. The former disease was set up by sloughing of the capsule of the liver (under surface) into the peritoneal cavity. The pneumonia was very recent, being developed probably during the twenty-four hours prior to death. The rapid breathing was due, in part, at least, to the peritonitis, and the latter, no doubt, stood in a causative relation to the development of pneumonia. The abscess probably bore some relation to the extensive ulceration of the large gut, being due to septic absorption from the ulcers. The adhesions between the pleuræ were old, at least in part. The temperature chart, character of the stools early in the disease, marked tenderness in right iliac region, appearance of the tongue, together with other phenomena mentioned, indicated the presence of a profound constitutional trouble.

The diagnosis of typhoid fever was probably the correct one. Absence of involvement of Peyer's patches militates against this view, but exceptional cases are recorded, in which the lesions of typhoid fever were confined exclusively to the large intestine.

Case 2.—George L., aged 25, single, born in Germany, laborer, was admitted November 17th, 1881. Had not suffered from previous sickness or injury; temperate, and possessed a strong, rugged constitution; began, 7th inst., to complain of weakness in the knees, diarrhœa, epistaxis, pain in the bowels, loss of appetite, and cough; restless; unable to sleep at night; chills supervened.

Examination disclosed the presence of numerous typhoid fever spots on chest and abdomen; marked iliac tenderness; no tympanites or sudamina; tongue large, dry and coated; sordes collected upon the teeth. Later in the disease

delirium, tympanites and cough were the prominent symptoms. Following these, abscess of the neck, with profuse suppuration, proved a complication of grave import.

December 1st. Observed a swelling, size of a hickory nut, situated over the body of the inferior maxillary bone, which does not fluctuate.

December 5th. The swelling mentioned has disappeared. A lump about as large as a walnut is seen in the side of the neck, to the left of the larynx, and one inch above the sternal extremity of the clavicle. There is severe pain in the region of the tumor, the larynx is pushed toward the right side, the voice is husky. The skin over the point of induration presents no redness or other abnormal character, save slight tension, the heat of the part not appreciably greater than that of other parts of the body's surface. The tumor would move with each pulsation of the carotid, but the sensation imparted to the hand when laid over the entire area was not that of a general upheaving of the mass, as is observed in aneurism. It was decided to wait a few days, and in the meantime apply a flaxseed poultice, medicated with laudanum, in order to diminish the pain of the part.

On December 10th obtained fluctuation in the tumor, which was quite distinct, but evidently deeply situated. Larynx pushed considerably to the right of the median line of the neck, impairment of the voice more decided, patient being able to speak only in a faint whisper. It was thought proper to test the nature of the fluid underlying the integument, and considerable of the structures beneath it, and accordingly a clean hypodermic needle was thrust into the swelling at the point of easiest fluctuation, viz, in the angle of junction of the inferior portions of the sterno-cleido-mastoid muscle. The needle descended to a depth of an inch and drew off a sufficient quantity of fluid to judge of the contents of the sac. The liquid thus obtained had the appearance of laudable pus. An incision through the integument was made, about an inch above the clavicle and external to the position of the carotid artery. A small director was then used to effect an entrance into the sac. This gave vent to the pus, but it was necessary to make a free opening, in order to remove all resistance to the flow. This was done with a curved probe-pointed bistoury. Evacuated about four ounces of pus, which was tinged with blood. Patient experienced immediate relief, both from the pain of the swelling and the pressure upon the larynx. The sinus was kept open by a carbolized tent of oakum. The medicated poultices were continued at intervals of six to eight hours. The cavity continued to discharge healthy pus until January 5th, at which time the pus cavity and its outlet were almost entirely healed. Patient was discharged from the ward Feb. 2d, 1882, cured.

This case was one of the severer forms of typhoid fever received into this hospital, aside from the complication spoken of. The latter is the only instance of the kind noted among the many cases of typhoid fever admitted here.

The deep-seated character of the suppuration, its proximity to the large blood vessels of the neck, and the question of diagnosis, occurring in a person professedly disturbed by the ravages of a severe typhoid fever, are considered points worthy of special notice.

Editorial Department.

Periscope.

Triplets (Prolonged Labor).

In the *British Medical Journal*, Dr. J. Howe records the following case:—

A few days ago I was called to attend Mrs. M., aged 34, in her third confinement. The two children by her former confinements are aged four and eight years respectively. At 10.30 A.M., the nurse who came for me stated the "child's feet and body were in the world for some time," and on going to the patient, I found it so, and delivered in the usual manner. From the long-continued pressure on the umbilical cord, the child was almost asphyxiated, and I adopted Sylvester's method for resuscitation, together with stimulation to the spine, and it gradually revived. On returning to the mother to examine the uterus, I found the head of a second child presenting above the brim of the pelvis, which was also distinctly felt through the parietal wall; but there were no indications of a second labor. I watched her closely all day, waiting the course of events, and toward night, finding the "pains" were not returning, I administered a drachm of the liquid extract of ergot; this did not produce the slightest effect, and there being no immediate symptoms of danger, I decided upon leaving nature to take its course, sustaining her strength with nourishing food and stimulants. At 12 P.M. she complained of aching pain in the back, for which I prescribed a draught containing thirty minims of tincture of opium, after which she had a good night's rest, and was altogether relieved from pain until 1 P.M. next day, when she again complained of the same pain, which now more resembled the commencement of true labor-pains, and continued so till about 4 P.M., when I thought it advisable to administer another drachm of ergot. Soon afterward, the pains increased in severity, until the head of the second child presented close to the outlet of the pelvis. She then had violent bearing-down pains for some time; but the head remaining still in the same position, and the patient getting weak, I applied Simpson's forceps, which are the ones I always use, and delivered the child at 6 P.M.

On again examining the abdomen, I found that, although it was very much diminished in size, there was still sufficient enlargement to lead

me to believe there was another child; and on making a vaginal examination, I found the head of the third presenting. This one was delivered naturally by three or four expulsive pains, and for some time after birth I thought life was extinct; but after adopting the usual methods for artificial respiration, and placing the child in a hot bath, which I think was of the greatest service in this instance, it soon revived.

I kept up the uterine contractions for some time; but finding they were not sufficiently strong to expel the detached placenta, I extracted it in the usual way. There were two distinct placentæ, united by a thin, membranous band; one of these, somewhat the larger of the two, furnished the supply to two of the cords. The first and third child weighed each six pounds, and the second six pounds and a quarter.

Hernia of the Ovary.

At a recent meeting of the Royal Medical and Chirurgical Society (*British Medical Journal*). Dr. Robert Barnes said that scanty advantage had been taken of the opportunity which the ovary, brought to the surface of the body, offers for physiological observation. He cited in abstract some of the most marked cases of hernia of the ovary which have been published, notably those of Goucy, Pott, Desault, Lallemand and Poquet, Deneux, Veboux, Cæsar Hawkins, Oldham Holmes, Coote, Œttingen, Meadows and Lawson, Courty, Leopold, Beigel, Boinet, Rheinstädter and Raffo, and related two cases observed by himself. 1. The patient, a single woman, aged 41, had always enjoyed good health. At 24 she sustained a rupture in the left groin and wore a truss; at 38 she observed a second swelling behind the first. The swelling and tenderness of the ovary were observed before and during the menstrual periods. Corresponding sphygmographic observations showed distinct rise of tension preceding the flow, and subsiding when the flow set in. The ovary was removed. A description and illustration of it were submitted by Dr. Goodhart. Dr. Barnes referred to Dr. Chambers' case in the *Obstetrical Transactions*, in which bodies simulating ovaries turned out to be testicles. He discussed the etiology of hernia of the ovary and uterus, citing Cruveilhier's views. He referred to the frequent complication of anomalies of development of the genital organs in association with hernia of the ovary; also with extra uterine gestation. He enumerated the varieties of hernia of the ovary, and referred to the supposed greater frequency of inguinal hernia when the ovary was concerned; to the greater frequency of congenital hernia; the complications with intestine and epiploon; the dependence of hernia of the uterus upon preëxisting hernia of the ovary, citing Cruveilhier's theory and the confirmatory conclusions of Puech, Deneux, and Cæsar Hawkins. He then discussed physiological points, illustrated by the observation of the herniated ovary; how the ovary swelled concurrently with increased tension of the vascular system before menstruation; how the round ligaments swelled. He discussed the order in which the phenomena of menstruation occurred, arguing that the ovarian nisus was the *primum mobile*, that nervous and vascular tension followed, and lastly, the menstrual flow; resting greatly upon sphygmographic observations. He suggested that the recent practice of oöphorectomy on Battey's principle would supply opportunities for deciding this and other questions; and proposed that sphygmographic observations should be made upon the subjects of this operation. He then discussed the diagnosis and treatment of hernia of the ovary, contending that it furnished a legitimate motive for Battey's operation *quoad* this affection at least. The paper was illustrated by sphygmographic tracings, by drawings of the amputated ovary, and by a cast of the parts.

Dr. Routh said that such cases as those described by Dr. Barnes were important, not only as indicating the symptoms of ovarian hernia, but as contributions to the history of menstruation, which no doubt began in the ovary. He had, however, observed some symptoms to which Dr. Barnes had not referred, in cases in which the ovary had fallen into Douglas' pouch; especially on the left side. In one case, that of a young lady, who had a displacement of the ovary into the left side of Douglas' pouch, where it had become adherent, pressure on the ovary caused sexual excitement. This, if observed in hernia of the organ, would be an additional means of diagnosis. Another symptom observed in these displacements was, that pressure on the ovary produced a feeling of sickness like that arising from pressure on the testicle.

Mr. Hulke said that cases of hernia of the ovary were rather frequently met with by surgeons. Of course, care was necessary in making a diagnosis. In 1871, 38 cases of hernia of the ovary were recorded and classified by Englisch of Vienna (see *Biennial Retrospect* of New Sydenham Society, 1871-72). Of these, in 27 the hernia was inguinal; and in 9 of these the displacement was on both sides. In most of the inguinal cases the hernia was congenital. As regarded the absence of any process of peritoneum in one of Dr. Barnes' cases, this might have existed and have become atrophied. In congenital cases, it appeared that the ovary was almost always accompanied by the Fallopian tubes; while, when the hernia was acquired later in life, the ovary generally came down alone. In many of the recorded cases, a distinct tubular process of peritoneum was described. As regarded operation, each case must be judged on its own merits. He had seen cases where a lightly fitting truss produced no discomfort to the patient, while in others it could not be borne.

Mr. Langton referred to the difficulty of diagnosis. At the Truss Society, among more than 4000 cases of inguinal hernia in women, there were 67 cases of hernia of the ovary. Of these, 42 were congenital, and in 25 the displacement occurred at various ages. The ovary was reducible in 29 of the congenital cases, and in 27 of these the patients were quite relieved by the use of a truss; the other two did not report themselves, and were probably cured. Of the cases in which the hernia occurred later, 8 were reducible and 17 irreducible; the proportion being the reverse of that in congenital hernia. The conditions of the ovary during the menstrual pe-

riods varied. In some, there was swelling of the ovary with effusion of fluid, which became absorbed; but when the hernia had been first observed between the ages of one and twelve, no such excitement of the ovary was developed. The application of a truss gave relief in most cases; in none were there any indications for operation.

Dr. Heywood Smith said that it was very rare to find sexual excitement produced by pressure on the ovary; pressure generally caused pain of a sickening character. Might not the sexual excitement in Dr. Routh's case have been caused by irritation of the pudic nerve, in consequence of the adhesions to the pelvis?

Dr. Barnes thought that the remarks of Mr. Hulke and Mr. Langton tended to confirm the opinion of Cruveilhier, that most cases of hernia of the ovary were congenital, and that the displacement was most frequent on the left side. He had not met with any cases in which distinct sexual excitement was produced by pressure on the ovary. He thought that the greater frequency of displacement in Douglas' pouch on the left side was caused by the round ligament and the ovary being more lax there than on the right.

Extraction of Teeth in Pregnant Women.

At a recent meeting of the St. Louis Medical Society (St. Louis *Medical and Surgical Journal*) this subject was under discussion. Dr. Borck asked, "Is it advisable to allow the extraction of a tooth or of teeth in a woman who is pregnant. I have been several times asked this question by dentists. Some eminent dentists are afraid to extract an aching tooth in a pregnant woman, lest it may cause abortion."

Dr. Green said that it does not necessarily produce abortion. Of course, there may be cases where such an effect would follow, but if the woman is suffering, and cannot be relieved by any other means, he would recommend the extraction of the tooth.

Dr. McPheeters said that there is a form of toothache which is sometimes a symptom of pregnancy. The teeth are sound, and, of course, it would do no good to extract them. He would not hesitate to advise the extraction of a carious tooth.

Dr. Hughes said, "Some patients, when pregnant, are extremely hyperæsthetic; the hyperæsthesia extends to the branches of the fifth pair. Other women, who are more or less nervous when not carrying a child, seem to possess more nerve then than at any other time. I do not know, in view of the varying and variable physiological condition in which we find women in the pregnant state, that we could arrive at any definite rule applicable to all cases. It is simply a question of individual temperaments, of conditions of the patient, and of the existence of centric or eccentric irritation; the existence or non-existence of central or peripheral irritation. And, if a pregnant woman is extremely hyperæsthetic, and you can find a focus of origin for it in the peripheral irritation of a decayed tooth, there would be no impropriety, in the majority of cases, I apprehend, in the removal of that decayed tooth. If in a condition of general nervous excitation, especially if centered in the brain or cord, you have any form of spasmodic display, and you find a possible peripheral source of the irritation, I think the general sentiment of the profession would concur in the propriety of removing that possible source of peripheral irritation."

Dr. Jonaston said, "Some years ago I was called to a lady who had been married six or eight weeks. The second left molar was decayed and an abscess was forming, and protruded from the root of the tooth. The abscess was painful and I advised opening it. She consented and I took my lancet and opened the abscess. This produced a tremendous shock, and in 24 hours she aborted. This case occurring in my early practice has made me very careful about extracting a tooth from a patient during the early part of pregnancy if she were of a nervous temperament; it is a hazardous practice. But if the toothache continues, the reflex irritation of the pneumogastric nerve, connecting with the great sympathetic, may induce uterine contraction, and cause the woman to abort. In such a case we should recommend that the tooth be pulled. There is no rule in the practice of medicine; and no rule as regards drugs, except castor oil. I have given calomel for 20 years, under the supposition that it acted on the liver, and now we are told that it doesn't act upon the liver at all."

Dr. Hurt closed the discussion by saying, "I think we are all obliged to concede the possibility of the extraction of a tooth during pregnancy producing abortion under certain conditions. There is no doubt, also, that there are circumstances under which the extraction of a tooth during pregnancy ought to be advised. The loss of a sound tooth ought not to be allowed unless something is going to be accomplished by it that cannot be accomplished otherwise. But I would have no hesitation about advising the extraction of a tooth from a pregnant woman if it was absolutely necessary to relieve her from a distressing, harassing pain that was wearing her out; and in doing this we may administer an anæsthetic without interfering in the least with the pregnancy. When she is under chloroform or ether we obviate the shock which is usually attendant upon the extraction of teeth. And experience has taught that pregnant women are very tolerant of these agents."

Remarkable Monstrosity.

Dr. Boisliniere recently presented to the St. Louis Obstetrical and Gynæcological Society (St Louis. *Courier of Medicine*) the following remarkable case which occurred in the practice of Dr. C. P. Smiley, of Potosi, Mo. The specimen was given birth by a mulatto woman, who had previously been in good health. When she was six months pregnant she fell across a door sill, which was raised above the floor, and struck upon the abdomen, and from this time the motions of the child, which had been perceptible before, ceased, or at least became very feeble. She was finally delivered, at full term, of this malformed fœtus. The mother was twenty-six years of age. There was no hereditary taint in the family. One leg is wanting from the hip, and there is no abdomi-

nal wall, and the stomach, duodenum, small intestine, mesentery and colon are without the abdomen. The colon is like a second stomach.

Dr. Coles was asked to say something about this case. He said: I have not had time to examine this specimen, and I shall not, therefore, address my remarks exclusively to the case in point, but make a few such as are suggested by it. Some two years ago I had a case in my own practice, in which a portion of the f rearm was missing, and also the occipital bone, and that suggested to me the question as to the causes of intra uterine amputations and other physical defects in children. It is well known that Montgomery and Simpson hold the view that these intra-uterine amputations are generally due to the presence of bands of adhesions, or to the umbilical cord passing around the limb. Now if you will notice such cases, you will very frequently find that the deformity is multiple in character; that is to say, if a limb is missing, there is apt to be also a bone of the head missing, a defect of the jaw, lip, or some other deformity, as there is with this child; the entire limb here is missing, and the wall of the abdomen is also undeveloped. It is very hard to account for many such defects on the theory of constricting bands. Montgomery reports two cases of children who were born, one with the parietal and several other bones undeveloped, and also a portion of the lower jaw; the other had an ulna and the parietal bone missing. I think the cause of such deformities is more frequently an arrest of development from some centric cause—from a deficiency of autogenetic force, rather than of secondary mechanical origin.

Dr. G. A. Moses then said: In connection with this—although it does not properly belong to this class of cases, still it might come under it in connection with the constricting bands—I will mention a case which I have under observation; the case of a German girl who came here to have an inconvenient and painful congenital stump amputated. On the left leg is what appears to be an amputation of the foot just above the ankle, and about three inches above the stump there is what appears to be a constricting band; the skin appears to be in close coaptation with the bone, just as if a ligature were drawn around the stump. This has become very painful of later years, and she came to have it amputated. She has some defect of every limb on her body, either fingers or toes, besides this defect which I have mentioned. They are all congenital.

Epileptiform Seizures.

Dr. E. C. Spitzka records the following singular case (in the *American Journal of Neurology and Psychiatry*) of epileptiform seizures associated with imperative conceptions. "He was consulted last summer, by a man aged 39, a native of Germany, with reference to certain attacks. They began with sharp and almost painful formications in the finger-tips and feet, then followed a sensation of losing consciousness, against which the patient struggled, and which he overcomes, as he avers, by catching on firmly to some fixed object. Should the attack occur while he is eating, his arms, and particularly his hands, contract violently, so that it is impossible to take the knife or fork from him, while he, conscious all the time, experiences inability to loosen this grip. At times the ordinarily tonic spasm exhibits an illy marked clonic character. His wife states that while he says but little during this attack, which is of hardly more than momentary duration, what he says is rational, and connected with his mental processes, as evinced before and after the attack. He was seen in one of them. His ordinarily mobile and dilated pupils became more dilated while he described the tingling aura. He was made inhale a few drops of nitrite of amyl, to which he reacted readily, and he expressed himself that the fit was broken. With the tingling he had, on this occasion, a sort of sensation as if telegraph wires were strung around his body, accompanied by a "drawing" feeling. At other times an odor was perceived, such as musk, opium, gas, or as of a very cool fresh air. These attacks have increased in frequency of late years. As a young man he experienced a great many of them, but under treatment they disappeared, the patient himself claiming that cannabis indica did more good than any other drug. The patient has been married fourteen years; four years after his marriage he, as he now terms it, "imagined" that he saw his clerk make a signal to his wife, and based a suspicion of marital infidelity on this fact; which, however, he corrected a few weeks later, becoming convinced that he had been the victim of a delusion. Three months later he experienced imperative conceptions, in the shape of the idea that, if he turned his head rapidly, he would encounter a sharp piece of broken glass or a knife. Particularly when a horse in the street car rears its head, he cannot, struggle as he may, divest himself of the idea that its neck will be severed by a large butcher's knife. These ideas seize on his mind suddenly, startle him by their strangeness, and he reasons vainly against their absurdity; originally they were very painful to him; latterly custom has bred a tolerance, and they are less annoying. He was placed on ergot and bromide of sodium, and provided, with nitrite of amyl, against the return of any prodromata of an attack. For five days he was entirely free from any untoward symptoms, after which time he was lost sight of.

Death from Asphyxia in Phthisis.

W. Barrett Roué reports the following instructive case in the London *Lancet*:—

On May 3d, 1881, I was called to see a wretched, neglected looking boy, aged eleven years. The history was that of a cold resulting in some chest affection, for which he had had no medical advice. A constant cough and pain in the chest had been present for five months.

On my first visit I found him sitting up in bed, breathing rather rapidly, but not seeming much distressed, and in the act of expectorating much purulent sputum into a receptacle already nearly full. On physical examination there appeared to be no flattening or falling in of the chest on either side, but the respiration was shallow. There was marked dullness at the right apex, both in front and behind, and large, moist sounds

were heard over the upper portion of the same lung, accompanied by small crepitations. There was increased vocal resonance all over the remainder of the right lung. On the left side there was exaggerated breathing, which I considered to be merely compensatory, with slightly prolonged expiration. Otherwise the lung seemed healthy.

The boy was treated for cough, and an attempt was made to improve his general condition by the administration of cod-liver oil, milk and beef tea. In spite of this treatment, he steadily decreased in weight. The temperature varied from 100° to 104°, usually highest at night time. From this I considered the prognosis to be unfavorable, but did not by any means apprehend a very rapid or a sudden termination to the case.

On May 19th, while sitting up in bed, and without any severe cough, blood mixed with air began to well from his nose and mouth, and in about three or four minutes he was dead, as it appeared, simply from asphyxia, the trachea and bronchi being full of blood, which the boy was unable to expel.

Post-mortem examination.—Body much emaciated. Heart healthy; right side gorged with thick, black blood; left side empty. The right lung was solidified throughout, except a small portion of the extreme apex, and composed of degenerated, cheesy-looking material. There was a large, irregular cavity, about the size of a goose's egg or larger, in the lower part of the upper lobe, extending for a considerable distance into the lobe beneath. This cavity was situated more toward the posterior than the anterior aspect of the chest; indeed, there was scarcely any lung tissue left beneath the pleura in the former situation. The cavity was full of soft, recent blood clot, which passed into the communicating bronchus and upward toward the trachea. On removing the blood clot, an artery about the size of a crow quill was found severed, and the ends hanging down against the walls of the cavity, one on either side. This vessel, previous to its rupture, had evidently passed right across the cavity. The left lung was emphysematous, the air cells and bronchial tubes were full of blood, and a clot passed a considerable distance up the left large bronchus; otherwise the lung was healthy.

Remarks.—Up to the moment of the occurrence of the hemorrhage I think we have a fairly clear case of a condition which, for want of a better name, I will call "pneumonic phthisis." The little patient had probably suffered from an attack of pneumonia in the right lung, the products of which, failing to be absorbed, had broken down, and then gradual disintegration had caused the cavity. The important question is, What was the immediate cause of death? Two causes only, I think, are worthy of consideration, viz., syncope from loss of blood, and asphyxia. There is certainly a third possible cause in shock; but the difficulties of arriving at any reliable conclusions as to this condition in children when the physical signs of organic mischief are so decided as in this case, justify the little notice I have taken of shock as an agent of death. With regard, then, to syncope from loss of blood, the post-mortem evidence is certainly against it. In the first place, the condition of the body strikes us: the face was mottled and of a purple color; in death from syncope it is usually very pale. In the second place, the right side of the heart was gorged with blood; in death from syncope all the cavities are usually empty. Really, the patient lost very little blood, considering the rapidity of his death. Upon consideration, then, asphyxia seems to be the immediate cause of death suggested by the post-mortem examination, for the following reasons—

1st. The right side of the heart was gorged while the left was empty.

2d. The large and smaller bronchi in both lungs, and even the air cells in the sound lung, were filled with blood, so as effectually to cut off all communication between the air and the air cells.

3d. The face bore the mottled and purple hue so well known in cases of death from suffocation.

Impure Chloroform.

At a recent meeting of the Académie de Médecine (February 14th) M. Regnauld presented a communication on the influence of impure chloroform in producing the gastric derangements which frequently accompany or follow surgical anæsthesia. M. Perrin, in 1878, considered that these symptoms were almost exclusively due to the impurity of the anæsthetic agent. As a simple means of testing chloroform, M. Regnauld recommends a solution of permanganate of potash, with the addition of a small quantity of hydrate of potash. A cubic centimeter of this solution is shaken up for about ten minutes, with five times the quantity of the suspected chloroform; if the mixture retains its beautiful purple violet color the chloroform is pure; if, on the contrary, it assumes a greenish tinge the anæsthetic agent is impure and unfit for use. To purify such chloroform, about one per cent. of pure concentrated sulphuric acid should be added to it, then after a few minutes the mixture may be decanted, shaken in a bottle with an excess of magnesia, and finally filtered. Chloroform treated in this manner does not take on a green tinge when shaken with the alkaline solution of permanganate of potash. Twenty samples of chloroform from different druggists were found more or less impure in all cases. M. Regnauld called attention to the destructive influence of solar radiation on chloroform kept in bottles.

In the discussion which followed, M. Gosselin stated that he would hesitate to admit that the impurity of the anæsthetic agent has any effect on the symptoms observed during chloroformization. Assuredly chloroform has caused death in perhaps 1 out of 5200 or 5300 cases in France, and in America in 1 out of 2500 or 3000 cases where chloroform was used to produce anæsthesia. Chloroform often induces cephalalgia, malaise, and protracted vomiting: but in the opinion of M. Gosselin these symptoms are due, not to the chloroform, but to some idiosyncrasy. To avoid these symptoms the chloroform should be administered methodically; the cornet or handkerchief being removed at short intervals, so that it may arrive in the lungs properly diluted.

M. Verneuil is of opinion that the odor of chloroform furnishes a very fair test of its purity. He considers, with M. Gosselin, that certain patients are peculiarly affected by this agent, and perhaps, among other causes, a great susceptibility of the pharynx to the local action of chloroform may induce spasm of the glottis, and the attacks of suffocation sometimes observed.

M. Perrin considers that the symptoms observed during chloroformization are not due to idiosyncrasy or the manner the anæsthetic agent is administered, as MM. Gosselin and Verneuil would have us believe. He is of opinion that chloroform recently made, pure, and which has not been exposed to the light, should alone be used for anæsthetic purposes.

Salicylate of Soda in Variola.

In the *Bulletin de Thérapeutique*, Dr. Baudon publishes the good results he has obtained in three cases of variola, by the use of the salicylic method. The first case was that of a man, 72 years old, who had been vaccinated in early youth. After three days, the face principally, and the whole body, showed signs of such an exuberant eruption as to warrant a most unfavorable prognosis. The case announced itself as one of confluent variola. The patient was in a state of great agitation, and it was a difficult matter to keep him in bed. Wine and brandy were prescribed, and taken without much trouble. So abundant was the eruption that the Doctor feared when suppuration set in the smell would be intolerable, and might prove infectious to the whole system. To guard against this, when that period drew near, the face and a great part of the body were anointed, thrice daily, with the following ointment:—

℞. Cold cream, ℥ iij
Salicylate of soda, ℥ j. M.

Besides this, the whole surface was dusted over with:—

℞. Talc, ℥ iij
Salicylic acid, ℥ iss. M.

The next day Dr. Baudon found the pustules had not increased in size, and the day after they began pitting; no pus was formed, nor was any smell developed. The parts not covered with ointment and powder underwent slight suppuration. Desiccation took place as usual, but the Doctor believed that the course adopted had averted serious impending results, among which the dangers to the attendants from the putrid smell were not the least. Delirium only lasted about three days, and ceased when the vesicles began pitting.

The daughter of the above patient was the next victim; she had been vaccinated but once. She was 23 years old, and her case was one of simple variola, although the eruption over the face was very abundant. Immediate applications of the ointment and powder soon brought about an abortment of the pustules.

The third case was that of a man, 35 years old, of weak constitution, who also had been vaccinated in infancy. The whole surface was covered with pustules. The ointment and powder were applied, and besides a tablespoonful of the following mixture was prescribed, to be taken every two hours:—

℞. Distilled water, f℥ iv
Salicylate of soda, ℥ j
Syrup, f℥ viiss. M.

Much to the Doctor's disappointment, the patient only took one spoonful of this mixture. Nevertheless, he soon recovered. Desiccation was rapid, and no pustules formed on the face.

In conclusion, we may say, that the foregoing method can do no harm, even if it has no other advantage than to do away with the repulsive exhalations, which are a source of danger to those around the patient.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——"Obstetric and Gynecological Literature, 1876–1880." By James R. Chadwick, M.D., Boston, Mass., comes to us as a reprint from the Boston *Medical and Surgical Journal*. In concluding this address, the author says, "To America I have no hesitation in according preëminence in this special field. Our countrymen meet the emergencies incident to child-bearing with a quickness of perception and readiness of action rarely seen in other countries."

——"Croupous Pneumonia; Is it a Zymotic Disease?" By D. W. Prentiss, A.M., M.D., Prof. Materia Medica and Therapeutics, National Medical College, Washington, D. C. An extract from the Transactions of the American Medical Association, 1881. His conclusions are as follows:—

1. Croupous pneumonia is an acute endemic disease, of zymotic origin.

2. The lung lesion is but a local manifestation of the constitutional disturbance, analogous to the ulceration of Peyer's glands in typhoid fever.

3. The specific cause remains undetermined.

4. The time of the year when the cause seems to be most active includes the months of January, February, and March.

5. The disease must run its course. Treatment should therefore be symptomatic and expectant.

——"A Case of Persistent Hyaloid Artery," by William S. Little, M.D., comes to us in the form of a reprint from the Transactions of the American Ophthalmological Society.

——Third annual report of the State Board of Health of Illinois, comes to us with the compliments of the Board. Along with this most complete and exhaustive model report, are blank forms, designed to collect information as to the number of persons vaccinated, and to further this practice, as well as a circular, in both English and German, setting forth the State laws on the subject of vaccination.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	**$5.00**
Half-Yearly Compendium of Med. Science,	**2.50**
Reporter and Compendium, - - -	**7.00**
Physician's Daily Pocket Record, - -	**1.50**
Reporter and Pocket Record, - - -	**6.25**
Reporter, Comp. and Pocket Record, - -	**8.25**

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

JABORANDI.

As long as the "healing art" has been practiced we have been without a remedy which, when given internally, would induce as rapidly and as strong a diaphoresis as a drastic action of the bowels could be caused by medical means at our command. Certainly we could in many ways establish an increase in the function of the sweat follicles, but our materia medica did not enable us to induce always quickly a powerful action of the skin. In *jaborandi* we do not alone possess such a remedy, but by the hypodermic administration of its active principle, *pilocarpia*, we have the power to bring about, even during unconsciousness, an action of the skin that the best hot-air or steam bath would not be equally able to create. That a remedy so reliable and filling such a void in our materia medica should still be comparatively neglected by many members of our profession, as we know to be the case, we can only explain in this way: that nearly from the beginning of its introduction its use in cases of heart lesions was decried as too dangerous, while its main indication was often found in just such cases (as in uræmia, in cases of morbus Brightii, with dilated hypertrophy), and while its other qualities (absorbing power, diuretic, etc) were rarely mentioned, so that a distrust was produced against a remedy, the usefulness of which cannot be over-estimated.

We will try to overcome the wrong impression, which has gained too much ground already, by mentioning once more the different preparations of this valuable article and the usual mode of their administration, and by illustrating in a few instances the great merit of this new addition to our not over-burdened resources.

The best and most reliable preparations of jaborandi for the practicing physician are, either the jaborandi leaves in the form of powder, or a good fluid extract, or the active principle, pilocarpia. The first are used either unaltered, as powder, which is perhaps the least effective mode of administration, or in form of an infusion, in both of which cases the single dose ranges from about thirty to sixty grains of the powder. We would prefer to either, however, a good fluid extract, of which adults take half a drachm in a small cup of hot or cold water, every half an hour, until four doses are taken. But far prompter in its action is the active principle, pilocarpia, of which the muriate or nitrate alone are employed, and in our country almost exclusively the first. Pilocarpia is preferred by many, as it can be used hypodermically, and its effect is then even more certain and undoubtedly more rapid, and besides, it is of special value in cases of unconsciousness, when the patient cannot swallow, points which have induced many to employ pilocarpia alone, and never jaborandi. Internally pilocarpia is generally given to adults, in doses of $\frac{1}{12}$ to $\frac{1}{6}$ of a grain, and more, and hypodermically in doses of $\frac{1}{16}$ to $\frac{1}{8}$ of a grain; in children doses have to be proportionally decreased.

If jaborandi is given in form of powder, infusion, or as fluid extract (ʒ ss every half an hour), its peculiar effect usually sets in with the third or fourth dose; the internal administration of a sufficient dose of pilocarpia is mostly followed, within a half to one hour, by the expected result;

while the characteristic phenomena of pilocarpia, if given hypodermically, will almost invariably show themselves from within ten to twenty minutes, though it may be safer not to repeat the dose, nor to follow it by a larger one than the first, till at least an hour has passed. The effect of the remedy, in the vast majority of cases, consists in a more or less intense salivation and the most profuse sweating. But this is not all; a freer and decidedly increased flow of urine usually is also observed, and naturally, as the capillary vessels at the periphery are unloaded, to a great extent, of their fluid contents, and of salts the latter carry along, a general stimulation of absorption takes place, and we find not seldom, as one of the results of pilocarpia, a more or less total disappearance of morbid products, the gradual absorption of which we, perhaps for a long time before, had been uselessly trying to bring about by other so-called absorbing remedies. In a few exceptional cases the effects mentioned do not appear, and instead of them, only an excitement of the heart, a more or less violent flow of saliva, and a feeling of great exhaustion are noted. But there is almost no remedy for which some persons have not an idiosyncrasy, and besides, if, under proper precautions, as stimulation and the avoidance of such experiments in cases of grave heart lesions, etc., the dose of pilocarpia is pushed as far as safety may permit, and frequently enough repeated, the results first described will, even in these exceptional cases, mostly be obtained. For the purpose of producing absorption, or a slightly but continuously increased action of the salivary glands, the skin or the kidneys, pilocarpia is often administered for a longer time, also in very small doses regularly three times a day.

If the effect of pilocarpia is watched, and the correct dose given, there is no danger in its administration. Even in cases of affections of the heart this remedy may be employed; if, however, the condition of the organ ceases to be compensating for the lesion, and especially if great dilatation exists, it is safer to make use of stimulation at the same time, and to note carefully the result of the treatment.

The indications for the use of jaborandi or pilocarpia are, therefore, clear. Whenever we wish to produce not only a profuse perspiration, but the latter as rapidly as possible, the hypodermic administration of pilocarpia is to be preferred. Certainly, we do not wish to offend our readers by mentioning the cases in which patients might need a "thorough sweat" within a short time, but we may draw the attention to a few special instances in which pilocarpia acted remarkably well. So, in uræmic coma, it will often, by the increased perspiration, not only relieve the blood of its superabundant urea, but reestablish the urinary secretion, while the same remedy has saved, many a time, the life of children, when in cases of the acute exanthemata the eruption was inducing dangerous brain symptoms, either by being too long delayed, or by the exanthem, having fully appeared already, suddenly "going back." While in some cases of acute articular rheumatism, pilocarpia, if early enough employed, *i. e.*, while the joints are still stiff, but not as yet red and swollen, will often act like magic, and in other cases of the same disease rather do harm; its effect in acute anasarca (that form of dropsy which, occasionally, after a severe exposure to wet and cold, sets in suddenly with fever, and without the kidneys being necessarily implicated), will always be that of a specific; the œdema will disappear in less than an hour. Further, in cases of glaucoma, of pleuritic effusion, of phlegmasia alba dolens, this remedy has frequently stimulated absorption to such a degree that the cases proceeded favorably from the time of the administration of the pilocarpia, and the usual absorbents, which in the same cases before had uselessly been employed, seemed to act with renewed power. And here it is, especially, where in chronic cases the occasional administration of pilocarpia in doses sufficient to produce active perspiration is indicated: when we wish to bring about further absorption, and the action of our absorbents seems to flag; when the case has come to a disagreeable standstill. On account of the diaphoresis, pilocarpia requires great power of the heart for the time being, as a sufficient amount of blood has

to be forced to the surface to permit the congested capillaries to unload so much of the watery portion of the body, and we have to be, therefore, very careful with the use of such a remedy in grave affections of the heart, or when the organ is seriously weakened, and counteract any debilitating influence by the simultaneous employment of stimulants.

Our purpose is fulfilled, if we have encouraged a more frequent use of jaborandi, or of its active principle, muriate of pilocarpia, when active persiration, a freer diruesis, or an increased action of the salivary glands, or increased absorption are wanted, and if we have been able to convince some reader that the remedy is by no means a dangerous one if administered according to its effect. In conclusion, we will only add, that the reported favorable action of pilocarpia in diphtheria has not been sufficiently proven as yet, and that the remedy is utterly useless if employed to start on a bald head a rich growth of hair; while almost every form of alopecia, if caused by illness, seems to be favorably influenced if the individual so affected is put under a course of minute doses of muriate of pilocarpia.

HIGHER MEDICAL EDUCATION.

The results of the changes and advancements in the requirements for graduation in the Medical Department of the University of Pennsylvania have been most gratifying. When they were conceived, many old wiseacres gravely shook their heads and feared that the experiment would be a failure, and that it would be necessary to go back to the old regime. But the young and energetic men who inaugurated this new departure had not acted impulsively and hastily; on the contrary, they had for years carefully and cautiously considered the new arrangements in every detail, and minutely inspected the arguments for and against its ultimate success. Now, after five years only, the results that have been achieved amply testify to the wisdom of their course. For a year or two the attendance upon this old school slightly fell off. Young men who were ambitious to complete their studies in the shortest possible space of time, and with a minimum expenditure of effort, realizing that they could not do so at the University, transferred their studies to schools that offered a more lenient curriculum, and where the chances of securing the coveted degree were much greater. In time, however, and it required but a short time, the better class of students commenced to realize that this extended and graded course, while it required more labor and time, yet in the end would graduate them much more accomplished and competent physicians than were ground out under the old plan. Therefore they turned their student footsteps toward this institution of reformed medical teaching, and its classes once more began to assume their former magnitude.

The requirements for graduation, the various examinations, became more stringent, and the amount of practical work required from the students was very much increased. Now see the result. It was announced at the last commencement that 37 out of 159 candidates were unable to meet the graduation requirements; about twenty-three and one-half per cent. of the aspirants were rejected. This is formidable, and teaches, plainer than any words or announcement can do, that a young man must be very capable when he receives his diploma from the University of Pennsylvania. It was also stated that fifty-one received averages over ninety, with a maximum of one hundred; in other words, that (almost incredible as it may seem to old-time graduates) fifty-one per cent. of the total number of successful candidates received this enormous average.

In our time, under the old system, the averages were not made public, so that we cannot say much about them, but as an index of what they most probably used to be, we can speak authoritatively of the averages gained by forty recent graduates from various colleges when examined for the position of resident physician in the Philadelphia Hospital. Out of this number, *only four, or ten per cent.*, received averages over ninety. So that the evident qualifications of a young man to practice medicine, when he first

emerges from college, have been increased five-fold by this new departure.

The complimentary remarks made about this last class, by old and competent observers, quoted last week (in our report of the commencement) bears additional testimony, if any were needed beyond our statistics, that the Medical Department of the University of Pennsylvania has struck the keynote of true medical education.

When it becomes generally known what high averages, and consequently how thorough has been the education received by the alumni of this school, it will become necessary, as it certainly now is advisable, for all other medical colleges to follow its example.

America, or rather the United States, is a great country. We have great statesmen, equal to the leading political lights of any nation. We are an energetic, go-ahead people, destined, beyond doubt, to become, in the not very distant future, the *Rome* of modern times. As Oliver Wendell Holmes so beautifully expresses it, "the treasures of the British Museum and the Vatican" will find new homes in our hospitable and progressive land. And as a recent distinguished and lamented Frenchman once said to his confrères in the legislative halls of his country, "The pristine greatness of France has departed, never to return in its former glory. The French tongue is no longer the predominant language of the world; English has superseded it, and, unless I am very far wrong, it will not be many years before this language is principally taught from the banks of the *Hudson*." Realizing how great we are, and what a glorious future we have before us, in all the solid and material elements of national progress, as well as in the arts and sciences, it becomes eminently proper, and the time has come, when we should use every endeavor to raise the education of our young prospective doctors from that low level always found in what we might call *provincial* nations, and place it upon the level of the older and more advanced European countries.

All hail to the men who have inaugurated this new departure. When the time comes, as it surely will, and very soon, that the inhabitants of our southern and western neighboring nations; when the South Americans, New Zealanders, Chinese, Japanese, as well as the young doctors from Europe, will flock to the United States, as we now journey to Paris, Vienna, and Berlin, to finish the medical education but partially completed at home; then will the names of these pioneers in the region of unexplored "Higher Medical Education" be written and talked about, as now are the great medical savants of continental Europe. Their names will be as immortal as are those of Harvey, Hunter, or Vesalius. They will be looked upon as men whose efforts, when this country was yet young, were directed, with all the fire and force of their energetic natures, toward placing medical education on a true scientific basis. Keep on, gentlemen, turn not to the right nor to the left; go straight ahead in your grand and laudable path, and you will ultimately receive, as you now deserve, the hearty support and coöperation of every *sensible* man.

Notes and Comments.

Paralysis Treated by Extension.

Dr. C. R. Illingworth reports the following case in the *British Medical Journal*. A case of paralysis of five months' standing was brought to me. The patient was a young lad, aged 15, and the disease at first came upon him gradually, he being able to walk, although with difficulty for some weeks. There then occurred sudden and total loss of motion in the lower part of the body, and he was unable to either sit or stand up.

He had been systematically galvanized for three months, without any appreciable effect. Reflex motor power was impaired, but good. A peculiar forward protrusion of the chin, together with the above mentioned symptoms, led to a diagnosis of curvature in the cervical region, leading to paralysis of motion from pressure upon the anterior columns of the spinal cord, and it was decided to adopt gradual extension. The patient was laid upon a bed, the head of which was very much raised. The body, from the shoulders downward, was fixed to an upright pillar at the foot of the bed, by means of ropes attached to each side of a tightly fitting waistcoat, and extension of the head was then made, by means of a halter with chin-strap, pulling in

a direction running through the crown of the head. The extending power consisted of an elastic ring and metal chain, fixed to the halter. By putting the elastic on the stretch, and fixing the chain to an upright pillar at the head of the bed, continual gradual extension was secured, the chain being tightened a link or two as the elastic slackened. This apparatus was used during the day only, for two months, with very good results. In one month the patient began to move his toes, and every day afterwards the motor power returned to his lower limbs, and he became able to get up. A pulley was then fixed to the ceiling, and he was instructed to pull himself up by the rope, several times daily. In a few weeks he was able to walk with assistance, and four months after the commencement of treatment he could walk steadily and well, without help.

The Value of Pure Codeine.

In an article published in the *Journal de Thérapeutique*, Dr. Leblanc, says: The reason why authorities differ as to the merits of codeine, is probably due to the fact that it is frequently adulterated by admixture of *chlorhydrate of morphia*. Out of 100 samples of so-called codeine syrup, recently examined, 23 were found not to contain a particle of this substance. As far as my observations go, I have found codeine to be a reliable soporific, valuable because of its mildness and the facility with which its effects are dispelled without leaving any unpleasant results. These effects are especially notable in cases of acute and subacute bronchitis, so much so, that I am inclined to believe this alkaloid possesses an elective sedative action on the mucous membranes of the bronchi and larynx. Under its influence the tickling sensations in the larynx, which induce coughing, are speedily calmed, and the patient falls into a quiet and refreshing sleep. Another advantage in favor of codeine is, that it is well tolerated by those persons who, owing to nervous temperaments, or from some unknown idiosyncrasy, are unable to take morphine.

There are a great many patients who, as it were, react against the effects of opium or morphia, either by experiencing nausea, or from a natural tendency to struggle against the hypnotic effects of morphia, as soon as they begin to be felt.

In such cases, *pure codeine* gives most excellent results; its effects are progressively soothing and culminate in a quiet sleep, unattended by either giddiness or those strange sensations, amounting often to delirium, which frequently accompany morphia.

From the foregoing observations, it would seem that codeine is a valuable remedy as a sedative in insomnia, colds, bronchitis, asthma, and whooping cough, provided it is perfectly pure.

Tonsillotomy by Ignipuncture.

The *British Medical Journal*, after commenting on the dangers of removing hypertrophied tonsils by all of the old methods, says: "It is now alleged that with the thermo-cautery this serious accident (hemorrhage) is no longer to be dreaded. M. Krishaber, who has tried it during two years, and has collected more than forty cases (*Annales des Maladies de l'Oreille et du Larynx*) has never had any accident after this treatment, and the results obtained have been lasting. It is likewise a novel application of a method which he has found perfectly successful for granulations of the larynx and pharynx. He proceeds as follows: The patient is placed—firmly, if a child—as if for laryngoscopic examination, in front of the operator, the mouth open, the tongue held back by a large spatula, the bottom of the throat well illuminated. M. Krishaber generally uses Paquelin's narrow-pointed thermo-cautery, heated to red heat. When it is only required to modify the nutrition of the gland, he gives preference to Trouvé's polyscopic galvano-cautery. The puncture of the gland, made as deeply as possible with the point of the instrument, should be repeated five or six times at each sitting. An interval of two or three days is left between the sittings, so as to allow the fall of the eschar, and to estimate the result. The operation is not at all painful, and pain, from burning, is rarely felt. Nothing need be administered after the operation, except, in some cases, a gargle of warm water, slightly carbolized.

Medical Treatment of Uterine Fibroids.

The medical treatment of fibrous tumors of the uterus is not absolutely fixed; subcutaneous injections of ergotine as a continuous treatment would be difficult to carry out, and electricity, which in the hands of M. Chéron has given good results, cannot be conveniently employed in private practice.

M. Chéron in the *Revue Méd-Chirurg. des Maladies des Femmes*, remarks that in many cases we will be obliged to have recourse to remedies which calm the pain and uneasiness felt in the abdomen, and to others having a resolvent action on the tissues of new formation.

For the first purpose he has found an ointment containing belladonna of great service, acting as a sedative and at the same time reducing the peripheric engorgement and causing a diminution in the volume of the tumor. His ointment is composed as follows:—

℞. Ext. digitalis, ℥j
Ext. belladonnæ, ℥ss
Ung. simplicis, ℥xss. M.

A portion of this ointment as large as a nut should be rubbed in over the abdomen night and morning.

The following solution has a decided resolvent action on tissues of new formation, and at the same time, as shown by Liegeois, a reconstituent action on the entire system:—

℞. Hydrarg. bichlorid., gr. ss
Aquæ destil., ℥viij. M.

A tablespoonful of this solution should be taken before each meal.

Resorcine and its Employment in Therapeutics.

MM. Dujardin-Beaumetz and Callias have made an extended study of this substance and its use, in the *Bull. Gén. de Thérapeutique.*

This substance was discovered by two Viennese chemists, Hlassiwetz and Barth, in 1860, among the products of fusion obtained by treating galbanum with potash; later on it was obtained from gum ammoniac and assafœtida.

Resorcine is very soluble in water, has a feeble odor, somewhat resembling that of carbolic and benzoic acid, and has the same properties as carbolic acid; a one per cent. solution acting as an anti-ferment, and a one and one-half per cent. solution as an antiputrid.

The authors are of opinion that this antiseptic, on account of its extreme solubility, its very feeble odor, its toxic effects being slight as compared with carbolic acid, it being also much less caustic, should be preferred to this latter in surgical practice.

Paget's Disease of the Nipple.

By Paget's Disease of the Nipple is understood a peculiar eczema-like affection of the nipple, which, though closely resembling eczema, differs from it in its well defined margin, in its intractability, and in that it invariably leads to cancer of the ducts, in middle-aged persons, if allowed to continue for some months. The relations of this disease were first pointed out by Paget, and hence the name. Munro relates several cases of the disease. In one of them, notwithstanding the nipple was removed before any symptoms of cancerous disease had appeared, the affection returned in the cicatrix, and was subsequently followed by cancer in the gland.

Ergot in Lead Palsy.

We read, in the *Lyon Médical*, that Dr. Stites recommends the following mixture in cases of hemiplegia and paralysis having their origin in chronic lead poisoning:—

℞. Potass. iodid., ℥ij
Ext. ergotæ fl., ℥j
Ext. nucis vomic. fl., ℥j
Tr. opii camph., ℥j
Syr. simplic., ℥iv. M.

A tablespoonful of this mixture may be taken night and morning.

A very great amelioration, if not complete cure, is obtained in about one month. The efficacy of ergot is explained by its well known action on the non-striated muscle fibres, and its long continued use does not seem to produce the results attributed to it (gangrene, etc.)

Cracked Nipples.

Le Paris Médical publishes a number of formulæ, which are recommended in this complaint:—

No. 1. ℞. Cosmoline, ℥xiiss
Liquid balsam Peru, ℥i½. M.

No. 2. ℞. Oxide of zinc, ℥i½
Cold cream or cosmoline, ℥x. M.

No. 3. ℞. Glycerole of starch, ℥viiss.
Oil of cade, ♏xlv. M.

No. 4. ℞. Cacao butter, ℥iiss
Oil sweet almonds, ℥ss
Extract of rhatany, ♏xv. M.

No. 5. ℞. Gutta percha, ℥j
Pure chloroform q. s. to dissolve.

By anointing the excoriations with this a slight film is formed, which will not become detached, even after sucking.

Knife Swallowed by an Infant.

The St. Louis *Courier of Medicine* reports the case of a boy, aged two years and five months, who, while playing with a two-bladed silver fruit knife, two and seven-eighths inches long, nine sixteenths of an inch wide, and one quarter of an inch thick, accidentally swallowed it, on December 27th, at 11.30 A.M. At the moment of its passing downward he became very red in the face, but beyond this experienced no discomfort whatever. On December 29th, at 9 A.M., forty-five hours and thirty minutes after it was swallowed, the knife was passed from the bowels, in a mass of consistent fecal matter.

Hoang-nan and Hydrophobia.

Paris Médicale reports that, at a sitting of the Société Médicale des Hôpitaux, January 27th, 1882, M. Gingeot read an account of a case of hydrophobia in man, treated with Hoang-nan, a medicinal substance used in the extreme Eastern countries as a remedy for a number of incurable diseases. Four pills were given, each containing grs. iss of the drug; but they were thrown up. M. Gingeot then had recourse to subcutaneous injections, dissolving the pills, and giving the value of two in each injection. The patient died, but he did not think this failure should condemn the process. In the first place, it should have been tried at an earlier stage of the disease, and then again, he believed that the right preparation to use as an injecting solution was the hydro-alcoholic, or an aceto-alcoholic extract of hoang-nan. M. Dujardin Beaumetz recalled the fact that during last year twenty-three deaths from rabies had been recorded in Paris. Different modes of treatment were used; but he gave his preference to the Russian method, which consists in the use of garlic, or sulphide of allyl, and thus far his patients had met with no accidents. He had made experiments with valdivin on mad dogs. This substance does not cure rabies, but it prevents the paroxysms. M. Sevestre observed that he had used pilocarpin, but without success.

Diphtheria.

Dr. Lolli, of Trieste, uses exclusively the following mixture in the treatment of diphtheria, and in sixty cases the mortality was less than two per cent., the malady having a duration of but eight or ten days, and being but rarely propagated to the mucous membrane of the respiratory organs:—

℞.	Ferri sesquichlorid.,	gr. xv–gr. xlv	
	Ac. carbolic pur.,	gr. xv–gr. xlv	
	Mel. rosæ,	℥ j	
	Aquæ calcis,	℥ xv.	M.

The throat is swabbed with this mixture every half hour, adults using it as a gargle, and it is, besides, to be taken in tablespoon doses, diluted every second hour. Of course tonics and very nourishing food form most important adjuncts to the treatment.

Arterial Elasticity.

The *Progrès Médical* reports that at a meeting of the Société de Biologie, on Feb. 11th, 1882, Mr. Arloing stated that he had measured the force of arterial elasticity, by counting the number of seconds during which this elasticity can, of itself, keep up the circulation of the blood. Having stopped the action of the heart by galvanizing the pneumogastric nerve, he observed that the blood continued its course during nine or ten seconds more; this he considers is an evidence that each arterial systole does more than simply to transmit the impulse it has just received.

Special Reports.

NO. IV.—ADULTERATIONS—(Continued).

SUGAR.

During the past year the attention of the Board of Health of New York city was called to the manufacture of a new kind of sugar by a secret process. It is made by mixing very carefully refined grape sugar with various grades of ordinary cane sugar. As the grape sugar is perfectly white, it, of course, gives a finer appearance to the dark sugars with which it is mixed, and as it costs only four or five cents a pound, considerable profit can be made. But the grape sugar used is made out of corn, sulphuric acid being used in the process. The new process sugar is not as sweet as cane sugar, but will be harmless, unless sulphuric acid or gypsum become mixed with it in its manufacture. This is a danger that may occur, and that renders the use of this sugar unadvisable. In connection with sugar we note that yellow candy is generally given its color by the use of the salts of lead, as much as seven grains of chromate of lead having been found in one pound of candy. The red is usually colored with cochineal, and is comparatively harmless.

COFFEE.

The Cincinnati *Medical News* says, "Ground coffee affords a field for adulteration, and for this purpose chicory, carrots, caramel and date seeds are the substances most commonly used. The beans have of late years been skillfully imitated, but as coffee is mostly purchased in the ground condition, the chief point for the consumer is to be able to form some idea as to the character of the latter article, and the following are a few simple and reliable tests: Take a little of the coffee and press it between the fingers, or give it a little squeeze in the paper in which it is bought; if genuine, it will *not* form a coherent mass, as coffee grains are hard and do not readily adhere to each other; but if the grains stick to each other and form a sort of '*cake*,' we may be pretty sure of adulteration in the shape of chicory, for the grains of chicory are softer and more open, and adhere without difficulty when squeezed. Again, if we place a few grains

in a saucer and moisten them with a little cold water, chicory will very quickly become soft, like bread crumbs, while coffee will take a long time to soften. A third test: take a wineglass or tumbler full of water, and gently drop a pinch of the ground coffee on the surface of the water, without stirring or agitating; genuine coffee will float for some time, while chicory or any other soft root will sink; and chicory or caramel will cause a yellowish or brownish color to diffuse rapidly through the water, while pure coffee will give no sensible tint under such circumstances for a considerable length of time. 'Coffee mixtures' or 'Coffee improvers,' should be avoided. They seldom consist of anything but chicory and caramel.

"French coffee, so widely used at present, is generally ground coffee, the beans of which have been roasted with a certain amount of sugar, which, coating over the bean, has retained more of the original aroma than in ordinary coffee, but this, of course, at the expense of the reduced percentage of coffee, due to the presence of the caramel."

New Remedies suggests another test for adulterated coffee. "It may not be generally known," it says, "that chicory, dandelion, and probably some other substances that are used for mixing with coffee, are readily deprived of color by a weak solution of chloride of lime (hypochlorite), and that this agent has very little action on the coffee. When this method is adopted, a portion of the coffee should be gently boiled a short time, in water with a little carbonate of soda, so as to remove extractive as much as possible; after subsidence, the liquor should be poured off and the residue washed with distilled water. When this has been sufficiently done, a weak solution of the hypochlorite of lime is to be added, and allowed to remain, with occasional stirring, until decoloration has taken place, which will probably be in two or three hours. The coffee will then form a dark stratum at the bottom of the glass, and the chicory a light and almost white stratum floating above it, and showing a clear and sharp line of separation." "The chicory, after this operation, is in the very best condition for microscopical examination, and it is not difficult to discriminate between chicory, dandelion or other substances. Although the lower stratum may be dark, and have all the appearance of coffee, other substances may be present, and should be sought for." Still another test has been offered by Mr. ALBERT SMITH, in the *Pharmaceutical Journal*. "I have found the following method work very satisfactorily: First, carefully examine the coffee under the microscope; then take 150 grains of the coffee and boil it in two pints of water, then strain, and add diacetate of lead until a precipitate ceases to be formed; stir well and put aside to settle; if the coffee be pure, the water above the precipitate will be perfectly clear, but if chicory is present, the water will be more or less colored, according to the quantity present, which can be estimated by comparing the depth of color, the same as the Nessler test for ammonia." It has been stated that damaged raisins are roasted to make the French coffee.

It will be well for any one desiring pure coffee to resort to all these tests.

TEA.

C. M. VORCE, F.R.M.S., says, "In examining a sample of tea for adulteration, the first process is to sift it, or to otherwise separate the fine dust from the leaves. Having done this, put a quantity of the leaves to soak in warm water. On examining the dry dust with the microscope, if the tea is good, we shall find it to be almost entirely composed of fine fragments of the leaves, detached hairs, a few particles of Prussian blue, and such particles of sand, fibres, etc., as are always present in any substance that has been more or less exposed to dust. The poorer the sample of tea is, the greater will be the quantity of siftings, and the more dirt, dust, fibres and coloring matter are found; there usually is what appears to be simply dried and powdered blue clay. It is insoluble in water and apparently unaffected by acids." From this he infers that the cheap tea that shows this fine granular substance is sprinkled, while damp, with dry, powdered clay, which adheres to it as it dries, thus increasing its weight. It is also possible that the steeped leaves, which have served to furnish the extract of tea used to flavor other leaves, are thus treated with clay, so as to be sold again as tea at a low price. In the poorest sample of tea that he could find, such as retailed for twenty-five cents a pound, were discovered a large amount of stems of some bush, also pieces of the stalk of some grass, very like the common timothy grass, somewhat colored, and undoubtedly flavored by soaking in extract of tea. It contained many other impurities. Yet it had a good fragrance and taste, and when some of it was steeped and placed on the table, it was pronounced by those who tasted it (and who knew not of the adulterations) "*pretty good tea.*" Taking, now, the leaves which were put to soak, and which have unfolded and become soft, we proceed to minutely examine the structure of the leaves, so as to

know whether any leaves we may find in a sample purporting to be tea are tea leaves or not. The upper surface of the tea leaf is smooth, without hairs or stomata, and in its soft and swelled condition, when examined in water and glycerine with one-inch objective, shows the surface to be composed of angular cells, loosely arranged, some oval or circular, with considerable space between, with a tendency to fall into rows corresponding with the network of spiral vessels. An occasional clear space (an empty cell) looks like a hole extending into the leaf. The network of spiral vessels is very close and tortuous. The under surface bears many long, slender, simple, pointed hairs, without divisions. The cells are packed and the stomata very numerous; there are no open spaces to be seen. A section of the leaf shows that the cells on the upper side are attached by the end for two layers in depth; then come the T-shaped cells throughout the substance of the leaf, with one layer of cells lying flat on the under surface and gradually merging into the heterogeneous arrangement of the middle part. The cells of parenchyma forming the substance of the leaves are of various irregular shapes, but usually about twice as long as their width; many are triangular or T-shaped, and they are never circular or oval. The leaves of the very cheap tea were found to consist mostly of leaves having the shape of tea leaves, but somewhat smaller, and of a yellowish tinge. The cells were of very similar shape and arrangement to those of tea, but considerably smaller. The hairs were also of the same shape and size, but they were hollow quite to the tips, and so numerous, that in some places the leaf seemed entirely covered with them. The stomata were of the same size and shape as those of the tea leaf; and on the whole it seemed probable that these leaves were actually the leaves of some species of tea." Adulteration can be readily detected by any one who familiarizes himself with the structure of genuine tea leaves.

Correspondence.

A Case of Traumatic Tetanus—Recovery.

Ed. Med. and Surg. Reporter:—

On October 11th, 1881, J. G., a lad of eleven years, sustained a crush of the arm and forearm, by the flange of a moving car-wheel. The integument was split and loosened, and both it and the superficial layer of muscles devitalized. The arteries were intact, and no bones broken. The limb was poulticed and anodynes given as needed. Quinia and iron were ordered in tonic doses. The integument and portions of the superficial muscles sloughed around the entire circumference of the limb, from a point three inches above the elbow to near the wrist. The case progressed favorably till the thirteenth day, when stiffness of the jaw and general uneasiness began to appear. The weather at this time was damp and cool. Ten grains potassium bromide and three grains chloral were ordered every two hours. On the second day of the attack the jaw could be opened only one-fourth of an inch. On the third day the muscles of the back were so contracted as to draw the head back into the pillow, and any effort to change the boy's position caused the greatest pain. Breathing had become very difficult, from the tonic contraction of the chest-muscles. Urination also was difficult and painful. He complained of pain extending from the pit of the stomach to the back. Risus sardonicus was marked. Noises within or without the house gave rise to general spasm of the muscular system, accompanied by intense pain. The granulations of the wound became sluggish.

The patient's mind was clear and pulse normal. He was fed upon beef essence and milk, and one-eighth grain morphia was ordered at night. On the fifth day there was no material change in the lad's condition. A liniment of equal parts tincture aconite root, laudanum, ammonia water and olive oil, was ordered to be applied to the back of the neck and trunk, to diminish the cutaneous sensibility.

The treatment was continued, and on the eleventh day the symptoms began to ameliorate. The muscles of the jaw relaxed so that it could be opened half an inch. Contraction of the abdominal and dorsal muscles became less marked and the spasms occurred less frequently. From this period the boy steadily improved, but complained of stiffness and cramps in his legs, till the end of the fourth week.

Whether the bromide and chloral exerted any curative influence is a matter of doubt; still, recovery under their use, after an attack so severe, is worthy of record. James G. Buchanan, M.D.

Allegheny City, Pa.

Anacardium Poisoning.

Ed. Med. and Surg. Reporter:—

Having noticed in a medical journal a case of poisoning by anacardium occidentale, reported by Prof. F. Le Sieure Weir, and such cases being not well known to a large majority of practitioners, an account of a case that came under my notice may be of some benefit to many of your readers.

Mr. G. Z., aged 41, house sergeant at one of our Philadelphia police stations, had given him several cashew-nuts (anacardium occidentale) by a sailor, who brought them from Brazil, and was told that the kernel was edible and very sweet, but that the juice between the inner and outer shell was bitter. Mr. Z. did not profit by this warning, however, and commenced biting through the nuts, getting the juice on his lips and fingers. By the next morning his hands and face were largely œdematous and covered with erythematous patches, which in another day had developed into vesicles. The neck, body, scro-

tum and penis, which were greatly swollen, legs and feet, were attacked alternately, the treatment seeming to have the effect, as he said, of driving the disease out at the toes. Mr. Z. was confined to his bed during the second and third days, complaining of drowsiness and headache, and having a heavily coated tongue and high fever. The acute symptoms were over in eight days; desquamation continued for more than a week after.

The treatment, which was discontinued on the eighth day, consisted of a solution of sulphite of soda (ʒ ij to Oj of water) applied to the affected parts every few hours, together with the following internal treatment:—

℞.	Sulphate of magnesia,	ʒj
	Tartar emetic,	gr. $\frac{1}{16}$
	Sulph. of morphia,	gr. $\frac{1}{64}$
	Water,	ʒ ss. M.

given every two hours during the day.

H. B. Nightingale, M.D.

Philadelphia, Pa., Feb. 1882.

News and Miscellany.

Insanity.

From the report of Dr. Kirkbride, physician-in-chief of the Pennsylvania Hospital for the Insane, we note the following:—

Of the great number of patients lodged within the walls of the Pennsylvania Hospital for the Insane last year fifty-seven were cured, eleven much improved, forty four improved and twenty-six died. The records of this institution show that since 1841, of the 8480 patients received at the asylum 1577 were rendered insane through ill health; 828 from intemperance: 287, loss of property; 396, grief; 243, religious excitement; 87, overwork; 510, mental anxiety, and 13 from uncontrolled passion. In addition to these, fright caused mental aberration in 53 cases; metaphysical speculation, 1; engagement in a duel, 1; homesickness, 9; stock speculation, 2; mortified pride, 3; use of opium, 33; use of tobacco, 17; tight lacing, 1; sudden acquisition of wealth, 1. The ages of a majority of the patients when insanity first appeared was between twenty and thirty-five.

The improvements to the hospital during the year have been notable. The work of finishing up "The Mary Shields Ward" is now being prosecuted, and it will soon be in readiness. Thus far it has cost $25,866.52. The expenditures of the male department during the year were $79,214.14, and the receipts $81,692.25. The expenditures of the female department were $88,676.13, and the receipts $84,964.17.

The Clock Said His Time had Come.

About midnight, the other evening, the door bell of one of our physicians rang violently, and the doctor, putting his mouth to the speaking-tube, asked what was wanted. "I must see you right away," replied a voice. "But I am sick, and not able to attend to business," said the doctor. "No matter," said the voice. "I must see you, any way." The physician arose—it was bitter cold, and he was quite ill—donned his clothes, and proceeding to the front door, let in, along with a strong blast of zero air, a man and a woman. Neither looked very much out of health, but the man's eyes rolled rather wildly, and he appeared somewhat disturbed. "Well," said the physician, "what is the trouble?" "The trouble!" replied the man. "Trouble enough! You see, Doctor, we own an old-fashioned clock, that has stood on our mantel-piece for years. It has not been touched in all that time. Its works are dusty, and its case defaced by time. Would you believe it, Doctor? to night, after we had retired—that is, wife and I—all at once that old clock started up and struck the hour of twelve. Of course, Doctor, that meant my time had come, or a warning that I must soon die. What shall I do, Doctor?" And the man moaned and rocked to and fro, while the wife wept to see her husband so affected. The physician said he did not see how any prescriptions he could give would put off the fatal hour. But the man insisted, and finally the doctor gave him a prescription for bromide of potassium, with which man and wife departed, somewhat consoled.

American Butter in Ireland.

It is noted by the *Grocer* (*Medical Press and Circular*), that there has never been such a scarcity of butter in Ireland as there is at present, and what they have is almost uneatable. It is made up in "lumps," by the small cottagers, who have only one cow, and, therefore, have to keep the cream until it is semi-putrid, to churn it in a filthy cabin, full of turf smoke, and fetch it to market some days afterwards. This scarcity is being supplied by importation of American and Danish butter and butterine.

Guilds of Health.

Sir Henry Cole suggests, in the *Medical Times and Gazette*, that for the protection of health and prevention of fevers of all kinds, a guild of health, voluntary, self-supporting, and self managing, should be established throughout the kingdom, in every parish district at least, and that there should be a central station or office established in it, connected with some suitable shop, such as an ironmonger's turnery, etc., on the principle of post-offices. This suggestion might be acted upon in our own country with great benefit to our citizens.

Surgery Aids Music.

Dr. William A. Forbes recently performed the following unique operation: The connecting tendons from that of the third to those of the second and little fingers were divided subcutaneously in the hand of a pianist, by which he was afforded unusual freedom of movement of this finger, and was much aided thereby in his performances on the piano.

Prizes.

The International Committee of the Red Cross or Sick and Wounded Soldiers have offered prizes

of $400 for the best and $100 for the next best essays on the best means of improvising aids for wounded and sick. They are to be sent in before 1st of April, 1883. Further information may be obtained from the Secretary, *Rue de l'Athénée*, 8, *Geneva*. These prizes are open to competition by physicians in any country.

Sir Robert Christison's Successors.

Dr. Balfour, Emeritus Professor of Botany in the University of Edinburgh, will be proposed as successor to Sir Robert Christison, in the office of Assessor of the General Council in the University Court; and Dr. R. Peel Ritchie, F.R.C.P.E., will succeed him as consulting physician to the Royal Edinburgh Hospital for Sick Children.

Items.

—A Woman's Medical College has just been started in Baltimore. All the Professors are males.

—Gray's Anatomy has been translated into the Chinese language, and published in six volumes, at Foochow.

—A death from chloroform is reported as having recently occurred at Munich, in the case of a woman on whom a dental operation was being performed.

—Professor Panum, of Copenhagen, has been chosen to preside over the next International Medical Congress, and Dr. Carl Lange has been appointed general Secretary.

—"How are you and your wife coming on?" asked a Galveston man of a colored man. "She's run me off, boss." "What's the matter?" "I is to blame boss. I gave her a splendid white silk dress, and den she got so proud, she had no use for me. She 'lowed I was too dark to match de dress."

—Carlyle once rode sixty miles, to Edinburgh, to consult a doctor; "having," as he said, "reduced my perplexities to a single question: Is this disease curable by medicine? or is it chronic, incurable, except by regimen, if even so? This question I earnestly put, and got the response, 'It is all tobacco, sir; give up tobacco.' Gave it instantly and strictly up. Found, after long months, that I might as well have ridden sixty miles in the opposite direction, and poured my sorrows into the long, hairy ear of the first jackass I came upon, as into this medical man's, whose name I will not mention."

OBITUARY NOTICES.

DR. DAVID KING.

Dr. David King, an eminent physician of Rhode Island, died at his home in Newport, on the 7th of March. He belonged to one of the distinguished colonial families of New England, and was fifth in descent from Ensign Philip King, who resided in Raynham, Mass., in 1680. He was born in Newport, R. I., the 12th of May, 1812, and in his earlier school days attended the Academy at Kingston, R. I., and then Brown University, whence he was graduated with honor in the class of '31. He then began the study of medicine with his father, Dr. David King, Sr., but completed his course in 1834, in the Jefferson Medical College, Philadelphia. He then engaged in successful practice in his native city, and eventually became one of its wealthiest citizens. In 1850 he went abroad to visit, for professional information, the hospitals of Dublin, London and Paris. Returning the following year, he resumed practice, but in 1872 he again visited Europe, and spent two years in inspecting all the principal hospitals of the Continent. He contributed many professional papers to the Medical Society of his State, on several occasions receiving the principal prizes for competitive papers on special subjects.

He was successively Vice-President, President and Censor of the Rhode Island State Medical Society, and member of and delegate to the American Medical Association. Dr. King wrote and published several valuable papers on historical subjects. His literary and historical tastes led him to collect a rare and valuable library of many thousand volumes, much of the same character as the remarkable library of the late Mr. Brinley. During the war of the rebellion one of Dr. King's sons, serving with the Rhode Island contingent, was mortally wounded in the first battle of Bull Run. Dr. King was Assistant Treasurer and a member of the standing committee of the Rhode Island State Society of the Cincinnati. He leaves a wife and several sons and daughters.

DR. CLIFFORD MORROGH.

Dr. Clifford Morrogh, while riding through New Brunswick, N. J., about 5 o'clock on the afternoon of the 13th of March, fell back into the arms of Dr. Donahue, his student, and died just after reaching his home. He was 58 years old, and was a leading physician of the city. He was graduated from the University of New York in 1850.

QUERIES AND REPLIES.

W. S. A., Mo.—We have never heard such precautions as you refer to recommended by any one.

S. C. C., Ind.—Your first question is too vague; what do you mean by *cirrhosis* of the stomach? To your second question, Yes, under ordinary circumstances, although at times, the histological appearances approach each other very closely.

MARRIAGE.

CURTIN — ROBINSON. — At Hartford, Conn., March 21st, 1882, by the Rev. Jos. P. Taylor, of Camden, N. J., Roland G. Curtin, M.D., of Philadelphia, and Julia T. Robinson, daughter of Mr. Edwin Taylor, of Hartford.

DEATHS.

HARRIS.—In this city, on the 10th ultimo, Dr. Jas. S. Harris.

HASTINGS.—On February 27th, John McD. Hastings, M.D., son of Rev. J. M. Hastings, of Germantown, Pa., in the twenty-seventh year of his age.

TOMLINSON.—In Cincinnati, Ohio, Dr. I. H. Tomlinson, aged 59 years, of apoplexy, February 26th, 1882.

KING.—At Newport, R. I., March 7th, 1882, Dr. David King, aged 70 years.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1310.] PHILADELPHIA, APRIL 8, 1882. [Vol. XLVI.—No. 14.

Original Department.

Communications.

ON BLOOD LETTING IN INFLAMMATORY DISEASES.

BY HIRAM CORSON, M.D.,
Of Conshohocken, Pa.

A physician in Illinois, in a personal letter, has criticised me pretty sharply for taking up so much space in showing the value of blood-letting in a single disease, and adds: "This senseless twaddle over cures made by medicines or remedies is getting worn threadbare; we need more teaching on the physiological action of medicines and less (fewer) specifics." Exactly what he means by this I do not know; but doubtless there is wisdom in it. I feel that I have taken up much of your space in the Reporter which, possibly, could have been better used; but this is so important a subject that men who have practiced a long time and proved the value of means of cure ought, in view of the fearful mortality which the present teaching of the medical colleges has produced, to speak out. I have this very day received a letter from a physician in Mi Hin county, in which he says: When, eleven years ago, I graduated at the University of Pennsylvania, I received a letter from my father (then a practitioner of thirty years' standing) telling me to supply myself with a spring lancet and a hypodermic syringe. I well remember my thoughts about it. I could see some use in the hypodermic syringe, but none in the lancet; but being accustomed to obey, I bought it." He has used it, too, and prizes it above all price. Let us pause here to reflect on this: eleven years ago, and ever since, the teaching there has been *silence* in regard to this important mode of subduing inflammation, or *denunciation* of it. The teaching had been of a kind to make this young man and hundreds of others feel that it would be little better than murder; and these boys who were prepared to operate to remove an ovarian tumor or a stone from the bladder, were utterly ignorant of the art of opening a vein. How fearful has been the result of such teaching! Fifteen years of fearful mortality in a curable disease. Nor has it ended yet. Since the second of my papers was published, the young, ambitious, and useful Dr. Darrach, of Germantown, in the very bloom and vigor of manhood, was struck down; in three days after visiting a patient, when in his usual health, he was a corpse. So, too, one of the most prominent politicians of our county, an able and valuable man, passed away after a brief illness from pneumonia. I know enough of the treatment to know that the lancet had no agency in producing these sudden deaths, and that arterial sedatives, and stimulants, and food were urged most unremittingly. Sad as I am to record these deaths, and strong as is the desire within me to discourse more at length on the fatal mode of treatment in vogue, not only in Philadelphia, but all over the country, and which the eminent Professor Gross has not been able to bring into disrepute, although he has so well proved its danger, I shall pause here to give to your readers the views of Dr. John L. Atlee on the value of blood-letting in inflammatory diseases. No physician conversant with the history of medical and surgical science in this country needs to be told of whom I am now

speaking. Take him as surgeon and physician combined, and he is the equal of any living man in all our vast country. Sixty years of continuous practice at the bedside of the sick has given him an experience which only the ignorant and presumptious will disregard. Hear him!

"My Dear Dr. Corson—

"I have read with very great interest your communications in the Medical and Surgical Reporter upon the treatment of pneumonia and kindred inflammatory affections. They accord so fully with my experience, more especially in the earlier period of my professional career, that I feel it my duty to give you some of the results.

"And first let me say what has often been said before, but which daily experience strongly confirms, that 'the *fear* of debility has caused the death of thousands.' It may be true that within the period of the last half century our constitutions have undergone so great a change that what was formerly considered strictly antiphlogistic treatment in acute inflammatory diseases cannot, with safety, be adopted; that a 'sthenic' course is imperatively demanded; and that instead of direct depletion by venesection, local depletion, purgatives, cold applications and absolute diet, we must use those *medicines* which control the action of the heart; partially paralyze the nervous centres for a time; and to prevent debility, give diffusible stimulants, abundance of food, quinine, nux vomica, etc., etc.; and this at a time when the functions of digestion, assimilation and nutrition are measurably suspended. *Indirect* debility is mistaken for *direct*. We must relieve the already overladen horse by additional burdens!

"I must admit that since the advent of the cholera, in 1832, and more especially the influenza of 1847, there has been a change in the character of acute inflammatory diseases, which was not met with before; but I am as well satisfied that it is not so great as to proscribe, to so great an extent, those remedies upon the employment of which we thought the lives of our patients depended; nor do I think that the mortality has been diminished, but, on the contrary, increased, by the change.

"I cannot believe that the loss of from ten to twenty ounces of blood in the commencement of an acute disease—as, for instance, pneumonia, when the blood is driven into the delicate tissue of the lungs, already filled to repletion by the previous congestion; which loss will not only relieve the congestion, but lessen the reaction, by weakening the power of the heart—can produce as much real debility as the progress of the inflammation will do if we endeavor to control it by less decided and efficient remedies. It is disorganization and not real debility and exhaustion we have to fear; and it is organic lesion which is the cause of death in a vast majority of fatal cases. Post-mortem examinations prove this. In the early stage, with a full corded pulse, there is no substitute for the lancet; and, in my own experience, I have found it, during the chill, or congestive stage which precedes the inflammatory reaction, to cut short the disease and rapidly restore the patient. In high febrile excitement it *unloads* the system, restores the suspended normal secretions, and awakens in it the dormant susceptibility to the effects of our medicines.

"Many years ago I was sent for to consult with a physician of large experience and of eminence in our county, in the case of a brother physician who had been ill ten or twelve days with an attack of bilious remittent fever, which was then very prevalent in his neighborhood. The attending physician wished to treat the patient as he had successfully done in other cases, by bark, as quinine, but he refused to take it and insisted upon the lancet. To decide between them I was called upon. I found the patient excessively pale and emaciated, with a small but corded pulse, complaining of excessive pain in the head, and saying that it felt as if it were surrounded with an iron hoop and somebody was riveting it on. He said he was certain the bark would only increase the difficulty. Upon consultation it was decided to support the patient in bed, in the sitting position, open a vein and bleed him until he fainted. This was done; as soon as he recovered, he exclaimed, 'Oh, Doctors, how good I feel!' The symptoms at once assumed a more favorable character, and after prescribing the necessary adjuvants, we left him. Two days afterward I visited him again, some sixteen miles from this city, and we found that for thirty-six hours he had remained free from pain, but that shortly before my arrival the severe pain in his head had returned. We sat him up in bed and bled him to fainting a second time. This was the end of it; he had no more fever, and had a rapid recovery. The *fear* of debility from venesection would have prevented its use, and the result might have been fatal.

"Some years after that I had a severe attack of bilious fever, from sleeping incautiously in a miasmatic locality. It was attended with intense pain in the head, and a feeling like that of my good friend, Dr. L., as if it was surrounded by an iron hoop and with every pulsation of the heart being riveted on. I sent for a physician and requested him to bleed me until I fainted. This required the loss of twenty ounces of blood, and was followed by prompt relief. Before the physician, who was engaged in conversation with my wife, had left the room, and almost as soon as reaction commenced, I felt a return of the same distressing pain. I requested him to tie up my arm and reopen the orifice. After losing ten or twelve ounces more I fainted again, and this was the end of my suffering. There was no return of fever, and the debility was not greater or more permanent than in my other fever cases where similar and apparently debilitating treatment had not been adopted. It is not unlikely that veratrum viride and quinine, etc., etc., would have restored me; but I would have suffered more and been less promptly relieved.

"I have bled in the cold stage of obstinate intermittents, with the effect of breaking up the paroxysms and preventing reaction, and with the relief of all the symptoms which usually accompany a regular attack of that disease. And could we but see our patients in the congestive stage of inflammatory diseases, and use the lancet before reaction commences, I believe that

many fatal cases might be prevented. How often do we not see epistaxis, and to a very great extent, prove critical and curative in the early, as well as the advanced stage of acute disease.

"Should any doubt arise as to the ability of the patient to bear the loss of blood, where the symptoms would indicate its propriety or necessity, we can do no harm by placing the patient in an upright position, opening a vein and watching the result. This I have repeatedly done, and I have never known mischief to come from it."

JNO. L. ATLEE.

Lancaster, Pa., April 5th, 1881.

Such is the testimony of Dr. John Atlee, and it is in exact accord with the testimony of his renowned and lamented brother, so emphatically declared in the meeting of the State Medical Society, at Easton, in 1875. After the publication of my second paper on pneumonia, the venerable Dr. Ezra Michener, one of the oldest and most eminent practitioners of Chester county, published an article in the *Country Practitioner*, of New Jersey, in which, after favorably referring to my article, he bore the most unqualified testimony to the value of blood-letting in all inflammatory affections; and while he admitted that there is an asthenic diathesis which debarred the present generation from using venesection and other measures of years ago, he has discovered that it is in the doctor's brain and not in the patient's body. I regret that space will not allow me to quote further from his valuable paper, which created a desire in Prof. Gross to corroborate his views, and impelled him to send his address on the "Lost Art" to the editor of the *Practitioner*, for publication. In a note to the editor he says: "From this paper you will see that Drs. Corson and Michener are not the only medical men who believe in the value of the abstraction of blood as a therapeutic measure. For, in the course of lectures which I annually deliver in Jefferson Medical College, I dwell with much force and emphasis upon the employment of the lancet in the early stages of inflammatory affections involving important structures before they have been overwhelmed by inflammatory exudations. *I wish to God that it was in my power to write this sentence, in letters of fire, upon the brain of every practicing physician and surgeon in the civilized world.* (Italics mine.)

"I have read Dr. Michener's article with much pleasure; it is a timely appeal to the common sense and judgment of practitioners, and I trust its warnings will receive attention."

With what appalling force these declarations of Doctors Atlee, Gross and Michener must fall on those who are losing patients with an illness of only a few days, and who stubbornly refuse to listen to the teaching of those earnest, able, and conscientious men who have handled and vanquished this disease countless times during the last half century. As I write memory brings before me the sudden deaths of Morton McMichael, Judge Cadwallader, Mr. Powers, and other prominent men, the pride of your city, suddenly carried away by a disease as certainly curable by proper means as almost any other, and which has no terrors for a physician who can use the lancet. But a few days ago an estimable lady, the wife of an eminent professor of Philadelphia, was swept away after a brief illness; and the papers have heralded the death of Rev. Dr. Vinton, from the same malady. I quote from the published statement of his illness.

"He arrived in Philadelphia on Wednesday evening, and on Thursday preached a sermon at the consecration services of the Church of the Holy Trinity. He was apparently in his usual robust health, but rose on Saturday morning feeling unwell. He was attended by an excellent physician, and subsequently, by a second. His disease proved to be pneumonia, and rapidly developed itself, with very alarming symptoms, and although accompanied with every possible aid of skillful medical and other care, terminated fatally." From this it appears he was well till Saturday morning, then rose "feeling unwell." A physician was called, and later, a second, and at 4 o'clock on Tuesday morning he died. His whole illness less than seventy-two hours.

But what of the treatment? Of it we have not a word. Can it be possible that the experience and advice, and earnest utterances of Dr. Gross, their revered colleague, who wished it was in his power to write his teachings, in favor of blood-letting in such cases, in letters of fire, on the brain of every practicing physician and surgeon in the civilized world, were disregarded? I tremble before the dread responsibility which, as physicians, we assume, and knowing how I have erred, will not arraign others, but entreat them to listen to the teachings of successful experience.

It does not satisfy me to be told that this or that skillful man was in attendance, and therefore I should rest assured that the best had been done for them. Let us hear the details of the illness and treatment of the many prominent citizens who have been snatched by Death from their families, while the physicians who so strongly condemn depletion by blood-letting, and boast so loudly of the potency of "antagonistic remedies," stood helpless and cowerin

before him. Histories of these cases would be more valuable to physicians in private practice, in city or country, than the "hospital reports" of cases of pneumonia in men and women whose debauched lives and dissolute habits, and whose long continued use of stimulants, have made them unfit subjects for such treatment as is imperative and so efficient in ordinary private practice. And here, I am bold to say, is the source of this fatal practice, which has spread with such fearful effect over our country. In all the great cities, the medical schools have medical control of the patients gathered in hospitals, and the practice thought to be efficient in these people, breathing the polluted air of their crowded homes, is daily proclaimed to the students, and by them carried to every section of our land.

Can it be, that in the presence of this great mortality, and the sorrow of homes made desolate, this stuffing, stimulating treatment, this exhibition of arterial sedatives with one hand and "heart tonics" with the other, shall go on, regardless of results?

In this effort to defend the treatment of acute inflammatory disease by blood-letting from the assaults made upon it by those who are ignorant of its efficiency, I have sometimes made aggressive war on the assailants, and have even wounded some of them; but if in doing so I have caused them to see the widespread and fatal results brought upon society by the reckless use of the weapons which they have wielded, or their ignorance of better, surer means of relief, I shall be paid for my labor, and society be relieved from its present fear of blood-letting.

A CASE OF ACUTE MILIARY TUBERCULOSIS.

BY H. W. RIHL, M.D.,
Of Philadelphia.

Mr. C., aged about 28 years, was tall and well proportioned; though vigorous-looking, he was languid in his manner, and was one of those to whom work seems always a burden rather than a pleasure. In the two or three years during which I was his family physician I had attended him several times. First, in June, 1879, I had prescribed bromide of potassium for paroxysms of what I supposed to be epilepsy. I had had no opportunity of seeing him in any of these, and was, therefore, compelled to make my diagnosis from the rather vague description given me of his symptoms on these occasions. After taking the bromide he was much improved, and my impression is that there was no recurrence. In July, 1880, he had intermittent fever, which lasted but a few days. In the same year, from September 4th to October 24th, he was under my care for a very severe pleuro-pneumonia, which involved the inferior half or two-thirds of the right lung, anteriorly and posteriorly. Some time after his convalescence, he resumed work at his trade—that of a printer. March 14th, 1881, he complained of weakness and cough. I was not at that time able to discover any disease in either lung.

On the 15th of last April I was summoned to attend him at his residence. He informed me that he had not been working for some time. He was confined to his bed, complaining of a very severe pain over the seventh rib, on the right side, about the point of union of the bone with its cartilage. There was little if any redness, and no swelling, but the pain was described as being exceedingly severe, persistent, and increased on the slightest pressure. It did not appear to be pleuritic, but directly under the skin. I questioned him very closely as to whether he had received a blow, or had fallen; but he was positive that he had not; that the pain had commenced a few hours before, and that he could not account for it. He was free from headache, and, with the exception of this pain, felt as well as he had for several months, though during that time he had not been strong enough to work. The pain was relieved by morphia, which he was obliged to take for three or four days, when a new train of symptoms made their appearance.

On my fourth visit, April 18th, my patient informed me that since my previous visit he experienced difficulty in moving his left arm. On examination I found partial paralysis of left arm and hand. This became worse, till, on the 22d, paralysis was complete—sensation as well as motion being much impaired. The left leg had also become paralyzed, but never to the same extent as the upper extremity. After my visit on the 18th (the day of the commencing paralysis), his wife called on me, and said that she could now give me the explanation of his trouble; that it had not occurred to her before, but that in a conversation with her husband that day they had recalled a circumstance which was a key to the whole difficulty. Three or four days before my first visit, she and her husband were in a crowded car; Mr. C. was standing, holding on to the strap. As they neared a point where the car turns westward he braced himself to encounter the shock of the curve; but instead of the car turning, it was drawn ahead, off of the track.

The concussion was so great that he was thrown some distance in the car, and became very sick. He returned home, and next day felt no further inconvenience, so that he had forgotten all about it till now. I told the family that where cars propelled by steam came into collision, troublesome nervous symptoms often resulted, but that I could not conceive that such could occur from a slight concussion in a street car, crowded as it was, unless there had been a previously diseased condition of the cerebral blood-vessels, when a slight cause might hasten the catastrophe which, sooner or later, would have happened without it. As the case became more grave I was inclined to consider this view as at least plausible.

The paralysis continued without much change till May 2d, when I commenced using Gaiffe's electro-magnetic battery. The improvement was rapid, and both arm and leg, in about eight days, regained much of their former power, so that patient was able to use his hand, and also to walk. For a few days the prospects of recovery became very bright; he was comfortable in every way; slept well and had a good appetite, and fair pulse. This apparent improvement lasted but a brief period. On the 15th I noticed, for the first time, that he had fever. I regret that I have not noted as often as I would now like, the condition of his pulse and temperature. From this time he grew rapidly worse. On the 17th I found him alone. On asking him how he felt, he made no reply to this, nor to several other questions. After a few moments he answered in monosyllables. As I was passing out of the door, he called me back and begged me not to be offended because he had not answered me at first, and gave as a reason, that he could not collect his thoughts. On my next visit, his wife informed me that he sometimes conversed without difficulty, and at others could not speak at all. He now seemed to have lost all power of sitting up or of using his limbs. On being placed on a chair he pitched forward and was utterly powerless to assist in getting in bed. On the 22d he had involuntary evacuations, which continued until the time of his death. On the 24th I noticed bronchial râles for the first time, on the right side. On the 26th Dr. Mills saw the case with me. I had stated to the family that there had been probably a cerebral hemorrhage. Dr. Mills took the same view, adding that meningitis of the convexity had probably followed a slight hemorrhage into or beneath the pia mater. Whether the hemorrhage had been caused by the jarring of the car, or not, was uncertain. May 27th, pulse 108; temperature 104° in the morning, 103° later in the day. May 29th, temperature 104°; urine contained a little albumen, a few granular tube casts, and granular epithelium; sp. gr. 1.020. On May 30th Dr. Mills again saw patient; his symptoms now bore a striking resemblance to typhoid fever; sordes about the teeth; low, muttering delirium; involuntary evacuations; slight bronchial râles; high temperature; frequent and feeble pulse; nothing but the rose colored spots and the previous history wanting, to make the likeness complete. On 31st temperature was 104½°, and on June 1st he died. June 2d a post-mortem was made by Drs. Mills and Eskridge, which revealed, as Dr. Mills will inform you more particularly, tuberculous deposits in brain, lungs, spleen and kidneys.

We are sometimes able to read articles which reflect much credit on our superior acuteness in diagnosis. You have probably already drawn the inference that such was not the object of the present paper, for though so many organs were diseased, and to such a great degree, I was at sea in regard to them all, perceiving no trouble in the lungs but the bronchial râles, nothing of the diesease of kidneys and spleen. All that I did know was that the brain was subjected to pressure, and the history given by the patient led me to consider the shaking up he had received as at least a plausible factor.

Even in the light of the post-mortem there are some features which still seem mysterious. One of these is the seemingly trivial nature of the disease at first, viz: the circumscribed local pain over the rib, not more than a couple of inches in extent, and in which no lesion was discoverable after death. Then how to account for the rapid disappearance of the paralysis after the use of electricity? Would this indicate that the paralysis was not owing directly to the pressure of the tubercles, but indirectly to the effusion of serum incident thereto, and the electricity caused the absorption of the latter?

The duration of the illness was six weeks. Roberts says the "usual duration is from two to eight weeks," that "no marked *physical signs* in connection with the lungs can be detected," and that it "may closely resemble typhoid fever." I will add, in answer to remarks made on this case, that dyspnœa was not marked till a few days before its close, and that there was not, till later in the case, a very frequent pulse, nor much cough.

NOTES OF THE POST-MORTEM EXAMINATION, AND REMARKS BY DR. CHAS. K. MILLS.

The skull was a little thinner than usual, especially in the parieto-temporal region. The dura

mater was adherent, at several points, to the skull-cap. On dissecting the dura of the convexity from the pia mater, they were also found adherent at several points, on both sides of the longitudinal fissure, in the postero-frontal and parietal regions. An irregular area of yellowish exudation or deposit, with more or less adhesion, was found between the membranes on the right side. This area was about five inches in length, along the median edge of the right hemisphere, in the postero-frontal and parietal regions, as already described, and converged to a point about one-and-a-half inches above the posterior third of the horizontal branch of the fissure of Sylvius, forming a somewhat irregular triangle, with its longest side along the median edge. The exudation was in patches in this district, and also extended downward in spots, on the median face of the brain, to the corpus callosum. A similar condition, but less marked, was found close to the median edge and on the median surface of the left hemisphere.

On stripping the pia mater of the right hemisphere, adhesions were found at points corresponding generally to the area of disease between the membranes. The region of the cortex involved in this adhesive inflammation was as follows: the upper half of the ascending frontal convolution, the posterior half-inch of the second frontal, posterior two inches of the first frontal, and one-and-a-half inches of the gyrus fornicatus.

On stripping the pia mater of the left hemisphere, it was found adherent above only along the median edge, but was irregularly adherent along the median surface down to the callosomarginal fissure.

No lesion was found at the base.

On examining the ventricles, ganglia and centrum ovale, the only lesion found was a small, hard, yellowish mass, in the posterior outer third of the right optic thalamus.

The right lung was adherent to the diaphragm and walls of the chest. The left lung was also adherent, but to a less extent. Both lungs were infiltrated with miliary tubercles.

The peritoneal covering of the spleen was studded with what appeared to be miliary tubercles.

The left kidney was small; and both in it and the right kidney miliary tubercles were found.

In the ileum, not far from the cæcum, was a small patch of ulceration.

After reading the notes of the post-mortem, Dr. Mills remarked that he had seen the case only a week before death, and had allowed himself to be led, somewhat by the history, to consider the condition of the brain only. His diagnosis had been meningeal hemorrhage, with inflammation of the meninges and exudation spreading from the original lesion. He had very positively indicated the *seat* of the brain lesion before death. The palsy was brachio-crural, *i. e.*, it involved the arm and leg, but not the face, of one side, which indicated the cortical motor region of the brain as the part diseased, in particular, the arm and leg centres. The partial recovery under treatment also pointed to the cortex as the situation of the lesion.

Dr. M. made a sketch of the brain upon the black-board, showing the principal convolutions of one side, and Ferrier's centres for the muscles of the leg, arm, speech, etc.; then outlining the chief deposit in the present case, he demonstrated how it confirmed the theory of localization in each particular. The anæsthesia might perhaps be accounted for by the small lesion found in the optic thalamus. He thought the present to be one of those rare cases of primary tubercle in the brain, with secondary involvement of the other organs, but with no demonstrable connection with the supposed injury.

Dr. Hall exhibited sections of the various organs under the microscope, showing the tubercles, and remarked of the specimens of the brain, that the disease deposit was limited to the surface, not following the vessels into the brain substance as much as usual in tubercular meningitis.

Dr. Eskridge thought it would be useful to recall the usual signs of miliary tubercle, as given in the text-books, in the light of such a case. We have absent the usual forerunning lung difficulty. The temperature vacillating and irregular, very high and very low, accompanied by profuse perspiration; these were all absent in this case. Pulse generally rapid or intermitting, not found. Respiration rapid, with bronchial râles; the râles alone being present in this case. Emaciation more rapid than the amount of fever indicates; which corresponded with that found in this case. Lastly, the ophthalmoscope, which seems to have been neglected in this instance, sometimes shows tubercles in the choroid, or an optic neuritis, when the disease is basilar.

Dr. Walker thought the diagnosis as regards the brain lesion a rather brilliant one, as the precise seat of the disease and its exact size was mapped out before death. Regarding the tuberculous nature of the deposit, and the involving of the other organs, he did not think a diagnosis possible under such conditions.

Dr. Beates said that the pathology of tubercle was sufficiently well known to settle the question of primary seat in any given case. A simple inspection ought to distinguish the recent, translucent, pearly tubercle from the older ones that had undergone caseous degeneration.

A CASE OF SUPPURATIVE SYNOVITIS OF THE KNEE JOINT.

Read before the J. Aitken Meigs Medical Association, of Philadelphia.

BY H. H. FREUND, M.D.

Willie C., aged four years, a healthy looking boy, without any ascertainable hereditary taint, on the 9th of August last, while playing with a footstool, slipped on the floor, a corroded sewing machine needle piercing the right knee joint, to a depth of three-quarters of an inch, the needle breaking off abruptly, at the cutaneous surface.

The needle, more accurately speaking, entered the joint at a point about one-third of an inch above and to the outer angle of the superior border of the patella.

At the time of occurrence of the injury no immediate symptoms were presented, the child merely remarking to its mother that it had stuck itself; nothing more was evinced by the child until the afternoon of the same day, when the mother noticed a painful expression upon the child's face, and questioning him, he referred the seat of pain to the affected knee. On examination, the joint was found to be swollen, particularly at the point of entrance of the needle, somewhat reddened and very painful to the touch; the mother detecting a sharp point of resistance, and thinking she encountered a foreign substance in the joint, carried the child to a prominent physician, who made an incision (the child being anæsthetized) and extracted the offending part of the needle.

A few days later constitutional symptoms developed: the child's sleep was not prolonged as formerly; sometimes crying out during the night; it became fretful and irritable, with loss of appetite, heavily coated tongue, and constipated bowels. With these symptoms there was also an evening increase in temperature, though of a remittent type. Coincident with the increase in severity of the constitutional symptoms, the local manifestations became more aggravated. The joint was immobile, painful on pressure, and all traces of its outline were effaced. The patella was freely movable and buoyed up from the articular surfaces of the joint by a fluid. There was no enlargement of the superficial cutaneous veins, nor was there at any time œdema of the extremity below the knee.

This condition was kept up for nearly three weeks, when a fluctuating point was discovered one-half inch below and to the right of the lower border of the patella. An incision was made, and three ounces of pus of a healthy nature escaped, more glutinous than ordinarily seen, evidently due to unchanged synovial fluid. After the pus cavity had been evacuated, an exploratory examination was made with a silver probe, which was freely movable over the articulating surfaces, and which conclusively proved that the joint was affected.

The synovial bursa beneath the patella must have shared in the destructive process, judging both from the point of ingress of the needle and the point of fluctuation of the pus cavity. The abscess continued to discharge small amounts of pus, until about the middle of October last, when it became much diminished in amount, and soon after the opening closed. With this closure the local inflammatory symptoms were much decreased in severity, the child regained its appetite, the secretory and excretory apparatus were again doing their normal work, and the child entered on convalescence. An interesting part of the history I must not forget to mention. After the incision had been made which gave vent to the pus, a mass of tissue protruded from the opening; this mass was as large as an ordinary sized adult little finger, and three inches in length; the surface was of a greenish-yellow color, having a beaded or fringed appearance; it was cut off by the mother, not producing any flow of blood. This mass, in all probability, was a part of a detached synovial fringe. Fungous granulations made their appearance around the orifice of the pus cavity, growing so rapidly that they had to be excised a number of times; the subsequent application of a pencil of nitrate of silver effectually prevented further growth. The seat of the pus formation must have been the synovial membrane of the joint; the cartilages of the articulating surfaces must have remained intact, from the fact that, at the present day, the little patient has perfect use of the limb.

The treatment throughout the case has been of the simplest, and can be dispatched in a few words. After the incision had been made, which allowed of easy extraction of the needle, the opening was immediately closed with adhesive strips and liq. acid. carbolic, applied by means of a flannel roller. The limb was put on a posterior angular splint; thus the joint was kept at rest. Later on the lotion was changed to lead

water and laudanum, applied by means of a large sponge, which passed nearly around the knee, thus accomplishing a twofold purpose—the application of an astringent and anodyne lotion, and the pressure afforded by means of the sponge (which was kept constantly wet), the sponge being confined by means of an ordinary roller. At the onset of the constitutional symptoms laxatives were given, with a quinine and iron solution, combined with milk, light broths, beef tea, and small amounts of sherry wine, frequently repeated. Small amounts of potas. iodid. were given, for its absorptive qualities. After the inflammatory symptoms had subsided, and the opening closed, a silicate of sodium dressing was applied, which aided much in the treatment.

To-day the child is in excellent health; it has regained its former vivacity, eats and sleeps well, and no inflammatory symptoms are visible. The patella has approximated its articular surfaces. He walks very well, and a casual observer would not recognize any defect in his gait.

PERMANENCE OF THE SCARLATINOUS VIRUS.

BY GEO. T. JENKINS, M.D.,
Of Keokuk, Iowa.

There has been a great deal said and written about the spontaneous origin of scarlatina, some claiming that unhygienic surroundings, sewer gas, filth, etc., may produce it, while the great majority of intelligent medical men believe the only source of origin is contagion. I have had physicians of large experience tell me they did not believe scarlet fever was contagious, but when I would present examples of its undoubted contagiousness, they would say, oh! well, they admitted it was epidemic, and this was as far as they would go.

It is nearly the universal testimony of recent authors and clinical investigators, that this disease is not only epidemic and contagious, but also that its contagious principle possesses very great permanency. There are several instances given by Dr. J. Lewis Smith, in his excellent work "On Diseases of Children," where the scarlatinous virus has remained in houses for months, notwithstanding careful disinfection was observed.

Sir Thomas Watson narrates an instance in which a strip of flannel remained contagious for at least a year, and Hildenbrand was infected by a cloak which, after exposure to the disease, had been put aside for eighteen months; hence we may assume that the morbific principle of scarlet fever is anything but volatile and unstable. I believe it is in consequence of the very great permanency of the scarlatinous virus that we have so many instances of the apparently spontaneous origin of this disease presented to our observation. We are unable to trace the source of contagion, either on account of our careless and superficial investigation, or its obscure manifestation, hence we conclude that it occurred spontaneously.

These thoughts were forcibly presented to my mind by a case that has recently come under my observation, which I deem of sufficient importance to be reported. I was called, on February 9th, 1882, to see Philip M., a child two years old, in consultation with Dr. Payne. The Doctor informed me that he had been in attendance upon the child for the past two days, and that his diagnosis was anginose scarlatina. The symptoms were characteristic and decided, and I unhesitatingly confirmed his diagnosis. The child died on the thirteenth day of the disease. The important point is the source of infection. It seemed obscure, and the parents insisted that the child had been nowhere to "catch the disease." It was the only child in the family; had not been away from home; there were no cases in that part of the city, and only three mild cases anywhere in the community, and in those contagion was easily established as a cause. We ascertained the fact that they had lost a child two years before with scarlatina, and that the child was just the same age of this little fellow. This led us to think probably some of the clothing might have been laid away without disinfecting, and saved till this child got to be about the same age and then put upon him. Upon inquiry we were told the child had worn none of his brother's clothing recently. When we called the next day, however, the mother exhibited a little woolen cap and said this was the only article of clothing that the child had worn recently that belonged to his brother. After further investigation we found that the child that died two years before had this cap on when he was taken sick, that it hung in the room during his illness, and that after the funeral it was put away in a closely covered tin box, without disinfecting. The box was air tight, and the cap had never been out of it until three days before our little patient was taken sick, when he wore it to a neighbor's and out on the street.

Both Dr. Payne and myself were fully satisfied, from the above circumstances, that the scarlatinous virus had been kept in that cap for two years. Why might it not, under the same careful process, be kept for ten years?

Hospital Reports.

PENNSYLVANIA HOSPITAL.

CLINIC OF JAMES H. HUTCHINSON, M.D.

Reported by Wm. H. Morrison, M.D.

Eczema of the Hands from Local Irritation; Bright's Disease, Complicated by Erysipelas of the Lower Extremities; Dropsy from Cardiac Disease.

Gentlemen:—Before bringing in any new cases, I shall show you a patient whom you saw last week, suffering from an eczematous condition of the hands, the result of having exposed them to an irritant. He was employed in cleaning out barrels which had contained fat. In doing this he used a strong solution of potash; this irritated the hands so much as to give rise to this marked attack of eczema. This does not really differ from the condition as it is sometimes seen in other occupations; for instance, it is not uncommon to have among grocers an eczematous condition of the hand, often called "grocers' itch." This is not due to the presence of an insect, but to irritant substances which they handle.

You will notice that the left hand has improved considerably under the treatment which has been employed. Last week it was swollen, the skin infiltrated, and there was a tendency to exude a thick, tenacious fluid. The condition of the left hand was at that time similar to that which we now see in the right. I first used starch poultices. In this condition the application of starch is often followed by great improvement. After the acute stage is passed we may use ointments, but to employ ointments in such a condition as we have in the right hand would do harm, for the ointment would soon become rancid, and act as an additional irritant.

In regard to constitutional treatment. It is, of course, questionable whether or not constitutional remedies are necessary where the disease is only a consequence of a local irritation, but thinking that, at all events, it would do no harm, I have put him on the use of Fowler's solution, five drops three times a day. It is well to order it to be taken immediately after meals, in fact, during the meal. Under these circumstances it is much less liable to produce nausea and vomiting.

The patient is doing very well, and in another week the right hand, will, I have no doubt, be in the condition of the left hand. Oxide of zinc ointment will be employed on the left hand, the starch poultices on the right, and the internal administration of arsenic continued.

BRIGHT'S DISEASE COMPLICATED BY ERYSIPELAS OF THE LOWER EXTREMITIES.

I shall now bring before you a case which I learn has been made the subject of a lecture by my colleague, a few weeks ago; but as his symptoms have somewhat changed since then, I thought that it would be instructive to bring him before you. He is fifteen years of age, but certainly does not look so old. He has been in the house since January 18th. The history is not very complete, but the main facts are these. Last November, without any apparent cause, he began to have pain in the back. This continued for some time, and was occasionally accompanied by nausea and vomiting. Soon after, swelling of the feet and legs was noticed, and later, swelling of the face. I have no doubt that a careful examination would have shown that the face was first swollen. Shortly after this the whole body became œdematous. The patient was not confined to bed before he came into the house. His mental condition is somewhat impaired, and this has made it difficult to get a correct history of the case. Upon admission, the whole body was œdematous, the tongue was moist and clean, the bowels regular, the urine had a specific gravity of 1.020, and contained about three-fourths albumen, by bulk; *i. e.*, when the urine was boiled and the albumen allowed to settle, it occupied about three-fourths of the former volume of the urine. This is, of course, a rough way of determining the quantity of albumen, but for practical purposes it will answer. Upon microscopical examination there were found hyaline, granular and epithelial casts, and later some fatty casts.

My colleague placed him on pilocarpin, one-eighth of a grain, twice daily. During the first twenty four hours after admission the patient passed twenty ounces of urine. On January 23d the bowels had been loose and he passed twenty-four ounces of urine. There was not much sweating, but the saliva was increased. On the 25th he passed thirty-eight ounces of urine. On the 30th, the day after I took charge of him, the quantity of urine had diminished, so that only ten ounces were passed; there was more œdema, nausea and vomiting; appetite poor; tongue coated and moist; bowels loose; legs more œdematous, and tender to the touch; hands also œdematous and some ascites. The pilocarpin was then stopped, and he was ordered infusion of digitalis, one drachm three or four times a day, and two drachms of the bitartrate of potassium, dissolved in a cupful of water, to be taken in the course of the day. The next day he passed more water, the œdema was somewhat relieved, and the patient was better. He was then ordered half an ounce of Basham's mixture three times a day.

The present condition of the patient, though still serious, is very much improved. You will notice that there is still œdema of the legs. This is, however, much less marked than it was ten days ago. You also notice on different parts of the legs an erythematous blush. This, also, was much more marked when I took charge of him. This redness has certain peculiarities. It does not shade off into the surrounding skin, but has a well marked border, and is tender to the touch. There is also a tendency to the formation of blebs. There is a large one on the left foot and several smaller ones on other parts of the leg. Again, we have a tendency for the redness, having appeared on one part, to leave this part and appear on another. This is not very common in the disease which I consider to be here present. In erysipelas, as it generally occurs, there is a tendency to spread, but it does not often leave one part and appear in another. There is one form of erysipelas (*érysipèle ambulante*) which is characterized by this tendency to skip; and there is another variety, *erysipelas erraticum*, or wandering erysipelas; but in this

case there has been, so to speak, actual jumps from one part to another.

We have then, in addition to the disease present when you last saw him, erysipelas of the lower extremities. Erysipelas occasionally occurs in the course of Bright's disease. You may recollect that when erysipelas attacks a person in a low condition of health, it is apt to affect the legs. Ordinarily the disease attacks the face, but in the great majority of such cases the patients are in fair general health; but in old persons and in persons debilitated by disease, erysipelas is prone to appear in the lower extremities. There is also, in œdematous limbs, a tendency to take on this inflammation. The fact that this complication may occur is an objection to certain methods of treatment which have been proposed to relieve œdema of the limbs. Acupuncture will often relieve the tension, but at the same time the little punctures which are made may be the starting points of erysipelatous inflammation. The œdema must have gone to a great extent, therefore, before I would recommend this plan of treatment. In this case the erysipelas appeared after the œdema had diminished. We find, then, a boy without a history of great exposure is attacked with pain in the back, nausea and vomiting, and shortly afterwards presents an œdematous condition of his lower extremities, followed, according to the history, by œdema of the face; but as I have said, if this patient had been living in a better class of society, the œdema of the eyelids would probably first have attracted attention. Œdema of the feet is often first noticed among people who pay little attention to their appearance, because the swelling renders the shoes tight. Although the history is silent on this point, it seems to me that this patient, most probably, either has been exposed to cold and wet, which in the great majority of cases is the exciting cause of the disease, or else, has had an attack of scarlet fever, so mild as not to attract attention. Bright's disease not unfrequently occurs after scarlet fever. I believe that in many cases where this disease follows scarlet fever the attack has been a mild one. I have now in my mind a case in point. A little girl had a very mild attack of scarlet fever; so mild that if I had not seen her at the very moment that I did, I should probably have failed to make the diagnosis. There were sore throat and fever, but the eruption was so slight, and continued for so short a time (for a few hours only) that I had a good deal of difficulty in persuading her mother that she had the disease. Two weeks afterward the patient began to pass blood; this continued for some weeks, and the Bright's disease, which was subsequently set up, continued for two or three years. I had begun to despair of the patient's recovery, when fortunately albumen disappeared permanently from the urine. Bright's disease may follow diseases other than scarlet fever. It may follow measles, erysipelas, occasionally typhus fever and diphtheria.

These symptoms, pain in the back, nausea and vomiting, and dropsy, all point to the kidney as the seat of the trouble; still these are not sufficient to make the diagnosis. I shall presently show you another case, in which there is as marked dropsy as here, but in which there is no disease of the kidney, or if there is any renal disease, it is secondary to the disease of the heart. I shall now test this patient's urine for albumen; first with nitric acid. It shows the presence of albumen very distinctly. You see a well-marked precipitate, which has the characteristics to which I have called attention on a previous occasion. It has a well-marked border above and below. It is as distinctly defined as if it had been cut with a knife; this is characteristic. We may have, from the addition of nitric acid to urine, a deposit of urates, but in such a case the precipitate is by no means so sharply defined as here, and it differs in appearance from this. I have before shown you how important it is to employ this test carefully and accurately. If I had simply poured the urine into the nitric acid, the precipitate would not have been so marked, and if I now agitate the liquid, the precipitate will be dissolved. By boiling we also have the precipitate. It is not as copious as it was two weeks ago. It does not now occupy more than one-sixth or one-eighth of the bulk of the liquid. Having obtained the precipitate by these two methods, we are pretty sure of the presence of albumen. Neither test is sufficient, but the two tests give definite and positive results. The urates may be thrown down by nitric acid, and the phosphates by heat, but the urates are redissolved by boiling, and the phosphates by nitric acid. It is also proper to take the specific gravity and the reaction, and to examine the urine microscopically. This has been done repeatedly in this case, and we have found well-marked casts. We have then, unquestionably, disease of the kidney.

It is necessary to examine the patient still further, to determine whether or not there is disease of any other organ. I have failed to find any disease of the liver, or of the heart. There has been heard at times a soft, systolic murmur over the base of the heart, but this is only a functional murmur, and due to anæmia. On auscultation, I hear œdematous râles over the lung. We have there the same condition that exists in the cellular tissue of other parts of the body. By very careful examination I can detect a slight amount of abdominal effusion. We have succeeded, then, not only in making the diagnosis of inflammation of the kidney, but also in eliminating any other disease as participating in the present condition of the patient. There is no other disease but Bright's disease present; there has not even been set up disease of the heart, which is so apt to occur in the course of Bright's disease.

This case may be said to be in the acute stage, just passing into the chronic. We have here the history lasting over a period of three months. We have, therefore, no longer an acute disease, but one becoming chronic. The condition of the kidneys is different from what it was in the early stages. They are probably less full of blood; they are paler, and probably present evidence of fatty degeneration. This is pretty certain, from the fact that fatty casts have been found in the urine. We have here a very grave condition. The patient, when I saw him for the first time, on Sunday week, was exceedingly ill. He had become much worse in

the few days during which my colleague was unable to see him. I found him with this erysipelatous condition of the lower extremities, suffering intensely with pain, exceedingly weak, œdematous and passing less water than natural. You remember that the treatment had consisted in the administration of pilocarpine. This appears at first to have produced a good effect, but after the remedy had been continued for a few days the good results passed away. When I took charge of the case it seemed to me not proper to continue this remedy. I am not quite sure that pilocarpine was indicated in this patient. In this disease there is a tendency to pass too little urine. Pilocarpine, by increasing perspiration, would have a tendency to still further diminish the amount of urine. It is therefore only in cases where the œdema is considerable, and where immediate relief is demanded, that pilocarpine is useful. The constant perspiration may have helped to bring on this erysipelas, which is certainly not a very common complication of Bright's disease in this house. I thought it better to put the patient at once upon diuretics. In Bright's disease the secreting substance of the kidney is diseased, and it may seem to you a questionable procedure to give the kidneys more to do; still, if you will consider the condition of the kidney, this objection will be found to be more theoretical than real. The tubes of the kidney are filled with debris which must be gotten rid of. This can only be done by increasing the flow of urine behind them, and thus washing them out.

I gave, therefore, cream of tartar, which is a good diuretic, in a large amount of water. Water is the best diuretic we have. It is rendered more diuretic by the addition of certain salts. I also gave him the infusion of digitalis, to act upon his kidneys, and also to stimulate his heart, which was feeble. Under this treatment he has improved considerably; the œdema has diminished in amount; he is able to lie down, which he could not do before, and the œdema of the lungs has diminished. I did not continue the cream of tartar, because it had a tendency to purge, and while purging is often an admirable way of getting rid of œdema, it is a weakening process. I then placed him on Basham's mixture, half an ounce three or four times a day. This is both a diuretic and also a tonic.

In regard to the treatment of the erysipelas. The iron in the Basham's mixture seems to have met some of the indications presented by this disease. The pain was so great that the limbs were wrapped up in laudanum and water. Lead water and laudanum would perhaps have been better, but this sometimes produces a deposit on the skin.

In reference to the prognosis. This is not very favorable. The evidences of disorganization of the kidney are very marked. The examination of the urine shows it; the general condition also shows it. He is, however, not beyond the possibility of improvement. We shall probably be able to effect a certain amount of improvement in his condition. We shall not be able, I think, to restore the kidneys to their former healthy condition. Such cases have been reported, but I have never had the good fortune to see them. I doubt very much if entire recovery ever takes place from this condition. Although all the other evidences of disease may pass away the albuminuria will still continue. Our views in regard to the presence of albumen in the urine have undergone considerable change since I was a medical student. When a resident in this hospital the presence of albumen in the urine was regarded as evidence of much more serious disease than now. We not only gave an unfavorable prognosis as regarded ultimate restoration, but as regarded life; but we now know that this is not the case. I know gentlemen in this city who are able to follow arduous occupations, who are active members of the bar, or active physicians, and who have had Bright's disease for a number of years and yet present little or no evidence of it: gentlemen whom, if you met them on the street, you would not suspect are the subjects of a serious disease. Recollect, however, that these men have a weak organ, and if they should be attacked by an acute disease of any kind, they would succumb more readily than a person who had not this disease. In other words, to use an illustration drawn from mechanics, "the strength of a chain is the strength of its weakest part," so that if a person with Bright's disease should contract pneumonia he would more readily succumb to it.

Let me here give you one caution: never allow a consultation to be called before you have examined the urine of your patient. This is an important point to recollect, unless you want to be mortified by its discovery afterwards, since very often the first question asked by the consultant is in regard to the presence of albuminuria.

DROPSY FROM CARDIAC DISEASE.

This is another case of dropsy, but the dropsy is here dependent upon a very different cause than in the last case. Dropsy is not a disease. Often, in the mortuary returns, you will see so many deaths from dropsy. This is only a confession of ignorance, since dropsy is only a symptom of disease. I show you, here, dropsy quite as marked, if not more marked than in the previous case, but in this man, examination of the urine at the present time does not show the slightest trace of albumen. The œdema of the lower extremities is very marked, with some tendency to the formation of blebs, but without any erysipelatous complication. The œdema extended considerably above the middle line of the body. The scrotum is distended. You will notice, however, that there is little or no œdema of the face. Œdema commencing in the face is generally attributable to kidney disease. Œdema beginning in the feet is just as often attributable to heart disease. In many cases we have disease of both organs combined. When we first examined this patient's urine, we found a specific gravity of 1.022, and a large amount of albumen (about one-third by bulk). This high specific gravity rather indicated that the albuminuria is dependent on disease of the heart. In disease of the kidney we have, generally, a low specific gravity, while in disease of the heart we often have a high specific gravity. I do not say that this is a rule without exception, but it will often help to distinguish the two diseases. No casts were found in this

man's urine. There were, then, no evidences of marked disease of the kidney.

Upon examining the heart we found the impulse diffused, rather outside of its usual position, and feeble. By percussion we have not been able to make out very definitely any enlargement of the organ. The reason of this is that the patient is the subject of emphysema of the lungs, which, consequently, cover the heart to a greater extent than normal. There is, however, no doubt in my mind, from the character of the impulse and of the sounds which are present, that we have enlargement of the heart with dilatation. As I listen over the apex, I hear very distinctly a systolic murmur. It is much obscured by the sonorous and sibilant râles which are heard in the chest and which are due to the œdema, but there is no question of there being a murmur. Yesterday, on getting him to hold his breath, I isolated the murmur very distinctly. I shall not ask him to do this to-day, as it brought on a severe fit of dyspnœa. The murmur is also heard at the left base of the heart, but not so distinctly. The same is true in regard to the right base. I do not think that this is a different murmur, but that it is the murmur transmitted from the apex, for it has the same characters and is much feebler. If there is any disease of the aortic orifice, it is secondary. There is no diastolic murmur; no evidence, therefore, of aortic regurgitation. We have here, then, a case of mitral regurgitation, mitral incompetency. A condition allowing the blood to regurgitate from the left ventricle into the left auricle, thus interfering very greatly with the circulation.

We have here a history of rheumatism. I shall rapidly read the history. "Family history is good. He had rheumatism in 1859. He enjoyed good health until one year ago, when, after exposure, he caught a severe cold, attended with much dyspnœa. This lasted for three weeks. Since then he has had attacks of shortness of breath. Six weeks ago he had an attack of dyspnœa. A few days afterward the feet began to swell. The dyspnœa has become more marked. The bowels are regular; the appetite poor. Lately he has been obliged to rise at night to pass water. No history of syphilis. He is anæmic and weak; pulse 110. The lungs are emphysematous and filled with râles. There is dilatation of the heart. The apex beat is diffused and most distinctly felt below the nipple. A systolic murmur is heard over the apex. The lower extremities are much swollen."

You will observe that the rheumatism occurred twenty-three years ago. It is very probable, from what we know, that the disease of the heart, which is now so prominent, occurred at that time. He then had, probably, some endocarditis, giving rise to the mitral incompetency. Why, then, has he not suffered before from this trouble? Because he has been in ordinarily good health. You notice that the symptoms from which he is now suffering began after an attack of cold. We have here an illustration of the fact I mentioned a few minutes ago, that a man with a weak organ is an unsound man. This man was not able to throw off this cold as readily as a man in perfect health, but instead, we have had an increase of the cardiac disease, as a result. You can readily understand that a bronchitis, which was probably the trouble which this patient had, would impede the action of the heart by interfering with the passage of the blood through the lungs. As long as the patient was in ordinary health he did not suffer from this disease of the heart but as soon as he became weak and debilitated, dilatation occurred and the symptoms that he now has began to appear.

We draw from this an important indication for treatment. We must try to restore him to his previous condition of health. The remedies required are not only those indicated by the disease of the heart, simply as such, but rather, those indicated by his general condition. Therefore, in addition to Basham's mixture and digitalis, indicated by the dropsy and the disease of the heart, I shall give him quinine, and later, if he can bear them, other remedies calculated to build him up. Cod-liver oil would be an admirable remedy, but I do not think he could bear it at the present time.

When the patient was admitted he was suffering greatly from the amount of the œdema, and in addition he had œdema of the lungs, causing great embarrassment of the respiration. The resident physician, very properly, placed him on purgative doses of elaterium. The object of this was, of course, to produce a copious discharge of water by the bowels. I have never seen it fail to give great relief where this condition is present. It is not a remedy to be continued for any length of time, because it produces great prostration. In the present case, in view of the urgency of the symptoms, the administration of this purgative was called for. At the present time the bowels are kept regularly moved, but drastic purgatives are no longer proper. I have placed him on Basham's mixture and the infusion of digitalis. Under this treatment he has improved considerably. I also gave him, in consequence of the condition of his lungs, the aromatic spirits of ammonia, as a stimulating expectorant.

In this case I made an unfavorable prognosis when the patient was first admitted. I hardly thought that he would live as long as he has. There has been, however, so much improvement that I hope he will become well enough to leave the house; but it is not likely that he will ever be able to do hard work again.

Tonic Pills.

The *Monthly Review of Medicine and Pharmacy* says the following tonic pills are much prescribed at the gynæcological clinic of the Hospital of the University of Pennsylvania:—

℞. Acid arseniosi,
Strychniæ sulph., āā gr. $\frac{1}{15}$
Ext. belladonnæ, gr. $\frac{1}{8}$
Cinchoniæ sulph., gr. iss
Pil. ferri carb., gr. iiss. M.
Et. ft. pil. No. j.

℞. Acid arseniosi, gr. $\frac{1}{15}$
Cinchoniæ sulph., gr. iss
Ferri et potass. tart., gr. ij M.
Et. ft. pil. No. j.

EDITORIAL DEPARTMENT.

PERISCOPE.

Puerperal Septicæmia.

Dr. J. S. Buck contributes the following case, illustrating the value of antiseptically washing out the uterus, to the *Medical Times and Gazette*:—

Mrs. M., married, aged twenty-eight, a multipara, aborted on Thursday, Oct. 27th, 1881. She was said to have been about three months pregnant, and was attended by a village midwife, who stated that "all the membranes came away whole," but that the patient lost a good deal of blood. I was sent for Nov. 1st. On my arrival I found her lying in bed, on her back, with her knees drawn up. Her countenance presented that peculiar sallow appearance usually seen in patients suffering from puerperal septicæmia. She appeared in a semi-conscious state. Temperature 104° F.; pulse 138, very small and thready. She had no lochial discharge whatever (this, I was informed, had ceased on Oct. 31st, the day previous to my seeing her). I ordered her one ounce of brandy every three hours, and gave her a mixture containing five grains of carbonate of ammonia, twenty minims of spirits of sulphuric ether, and one ounce of decoction of cinchona every four hours. On Nov. 2d patient seemed rather weaker, if anything. Temperature 104.4° F.; pulse 140, very small and thready. I continued the same treatment, only ordered the brandy every two hours, and repeated the chloral and bromide draught, as she had not slept. On the 3d, at 4 A.M., she had an attack of convulsions, which lasted about an hour, and in them she bit her tongue rather severely. At 2 P.M. she had another attack of convulsions, lasting about an hour and a half. On my visit she had a slight yellow discharge, which the nurse said smelt very badly. Temperature 104.4° F.; pulse 138, weak and thready. So I determined to wash out the uterus antiseptically. This I accomplished fairly easily, as I found the os uteri would admit the tips of two fingers nearly. I injected a quart of tepid, weak solution of permanganate of potash, which brought away a quantity of very offensive matter and shreds of membranes. I continued the brandy and ammonia treatment. On the 4th I was surprised to see the change in the patient. She had slept well without medicine. The pain in the abdomen which she complained of the day previous had ceased, her temperature had dropped to 101.6; her pulse was 120, much fuller and stronger, and she had had no more convulsions. I determined to give her another intra-uterine injection, which I did with some little difficulty, as I found the os somewhat smaller than on the day previous. I injected the same amount and of the same character, and brought away a few shreds of membrane, but it was not offensive at all. I ordered the brandy every four hours, and continued the ammonia and bark mixture. On the 5th she was much brighter and better. Temperature 101°; pulse 120. She slept well; no pain. I ordered the same treatment. On the 9th the patient was progressing well. Temperature 99.4°; pulse 96. She said she felt well and wanted to get up. I ordered her ten minims of dilute nitric acid and an ounce of the decoction of cinchona three times a day. On the 12th she was out of bed for about an hour. Temperature 99°; pulse 88; going on very well. 21st. Since the last note the patient had improved very much, and she is able to sit up all day. She takes her food well and sleeps well; has no discharge, and her temperature and pulse are normal. I have been giving her ten minims of the solution of dialysed iron three times a day, after food, and ordered her to continue taking it.

I think this case shows the good effects of antiseptically washing out the uterus in such cases. Dr. Playfair, in his "Science and Practice of Midwifery," speaks very highly of the practice, especially in those cases of "autogenetic origin," or self-infection as he terms them; and certainly, in my case, the effect was marvelous.

After Treatment of Lithotrity.

In a recent issue we furnished an abstract of a lecture by Sir Henry Thompson, on "Lithotrity at a Single Sitting." In continuance we can now furnish his remarks on the after treatment, which we glean from the *Lancet*: "When the patient has fully recovered from the ether, if suffering severely, say three or four hours after the operation, a condition which is quite uncommon, a hot hip bath, as hot as he can bear it for fifteen minutes, gives great relief. For the first three or four days the treatment will consist of recumbent position, external warmth, frequent hot hip baths, and small but frequent doses of solution of potash, to neutralize the acidity of the urine. If the urethra is over stretched or bruised, an india rubber catheter may be tied in for twenty-four hours or so; if the bladder had previously lost the power of emptying itself, such an inlying catheter for a day or two is better than frequent catheterism. It will sometimes occur, in the course of the most favorable cases, that on the fourth or fifth day a little excitement appears, the bladder becomes irritable, urine cloudy, and after twenty-four hours subacute cystitis is established, destined oftentimes to be troublesome for a week or two. To avoid this, great attention must be paid to the rest treatment noted above.

His proportion of deaths from the "*single sitting operation*" was only three per cent., while in four hundred cases, by the old method, reported to the Royal Medical and Chirurgical Society, the death rate was seven and one-half per cent. The mean age of the 101 men upon whom he operated was over sixty two years and a half. He thinks he is justified in concluding that the morbid condition of the bladder following lithotrity for uric acid and oxalate of lime calculi in previously healthy organs, occurs less frequently now than heretofore. In order to guard against

the danger, our first care should be to avoid in every case, where it is possible, the use of instruments, whether for crushing or evacuating, which over distend and irritate the urethra and neck of the bladder. Our rule must be not to employ larger instruments than the size of the stone demands. He cannot too earnestly warn the inexperienced operator against the needless risk he incurs when, in presence of a small or moderate-sized stone (and the majority met with belong to one of these two categories), he uses the heavy lithotrite and the large evacuating tubes which have of late been introduced into this country. In order to remove two or three hundred grains of calculous matter from the bladder—and many calculi weigh less than a hundred grains, while all ought to be found before they attain that weight—it is wholly unnecessary, I will even say it is unwarrantable, to introduce lithotrites and evacuators with the diameter of No. 18 or 20 English scale into the bladder. I am certain that the mere splitting, for it is not dilatation, of the urethra and neck of the bladder, which sometimes follows the introduction of such instruments, has sufficed to produce symptoms often distressingly painful, sometimes obstinate in duration, occasionally fatal. Surely it is more prudent to be stow two or three minutes more on the work, to ensure more complete crushing, so that the débris may be removed by a tube of 15 or 16 English diameter, than to crush coarsely and use an evacuator, which infallibly inflicts serious mischief in a certain proportion of cases.

I will briefly sum up our subject thus: Lithotrity completed at a single sitting is, in experienced hands, an operation unequaled in its safety for the patient.

It appears also to produce less subsequent persisting irritation of the bladder than the operation by several sittings.

No new form of instrument is required by this operation.

The value of the proceeding lies altogether in the removal of all the foreign matter from the bladder at once, so that nothing remains to excite inflammation, in an organ already irritated by the process. And the less irritating the operation has been, the more certain and more speedy will be the recovery.

It should be employed by beginners only for calculi of moderate size, when hard. If calculi are large, as well as hard, a young surgeon will probably proceed more safely by lithotomy. In friable phosphatic calculi size offers a much less serious difficulty. Lithotrity at a single sitting, for a hard calculus, upwards of an ounce in weight, and *à fortiori*, when double that weight, certainly demands an experienced operator.

Unusual Effect of the Sulphide of Calcium.

Dr. W. T. Alexander read a paper on this subject before the New York Dermatological Society (*Archives of Dermatology*), from which we extract the following: "Since the re-introduction to professional notice, by Ringer, Cane, and others, of the sulphide of calcium as a remedy for pustular acne, furuncles and other suppurative processes in the skin and glands, testimony as to its merits in these affections has been furnished by a large number of observers. But, in a very small number of cases that have recently come under my notice, the agent has seemed to exert an action so different from that usually ascribed to it in text books and communications to journals, that they seem sufficiently interesting to justify me in briefly reporting them." He then reports three cases. In the first, by mistake, the drug was taken in eight-grain doses three times daily, for several days. During this time the acne not only became worse, but several large, highly inflammatory, and exquisitely sensitive furuncles appeared on the wrists, forearms, and neck, attended with moderate febrile movement, gastric disturbances and diarrhœa. He then stopped taking the sulphide and the furuncles began at once to improve, becoming less painful, losing their inflammatory areolæ, and the previous purulent discharge from them ceasing. In the second case the drug was given in doses of one-tenth of a grain four times daily, for a small, indolent, painful, abortive furuncle on the back of the neck. In a few days, several large, intensely inflammatory, and very sensitive nodules appeared on the face, arms, and other parts of the body. As these symptoms were held to be simply manifestations of the original disease, the use of the drug was persisted in, the dose being increased. The furuncles became larger and more painful, until, finally, the patient having lost faith in the drug, it was abandoned, and she began to improve almost immediately, and was soon entirely well.

In the third case it was given in doses of one-fourth grain four times daily, with results precisely similar to the preceding two. That the pathological phenomena in these cases were not simply coincidences, but were due to the action of the sulphide of calcium, is rendered almost certain by the fact that recovery began in each of them immediately after the use of the agent was suspended. That they are not instances of drug aggravation is also rendered probable by the fact that in none of the cases was there any evidence of suppurative action in the skin before taking the medicine, and that this was a prominent element in all three of them after it had been taken for several days. Abundant testimony can be found showing the value of this agent in suppurative diseases, particularly occurring in the skin and its appendages, but that it is capable of *causing* such affections has been stated, as far as I know, by only one author. The most reasonable explanation of the pathological changes in these cases seems to be to attribute them to the influence of that indefinite and undiscoverable quality known as individual idiosyncracy or susceptibility to the perverse action of a particular agent, occasionally observed in practice.

The Sphygmograph.

The London *Lancet*, in an editorial plea for the more general use of the sphygmograph in private practice, thus well describes its merits. The height of the up-stroke made by the needle depends on conditions and methods of applying the instrument which deprive it of any significance, but its

direction, whether oblique or vertical, in relation to the rapidity of the movement of the paper, is of great suggestive moment. If the contraction of the left ventricle be free and the distribution of blood through the arterial system be unimpeded, the up-stroke will rise nearly at a right angle to the base line of the paper. If the impulse communicated to the blood-current by the heart be weak, or the vessels be rigid, so that they dilate slowly, the up-strokes will be oblique. Again, if the vessels be in a normal state and free, the down-stroke will commence with a sharp recoil at the instant of the subsidence or expiration of the force of the heart's action, as shown by the up-stroke. The juncture of the up-stroke and the down-stroke will therefore be acute. The rapidity of the fall shows the state of the vessels, as regards their rigidity. The contraction of the vessel, which is a reaction upon the dilatation effected by the impulse communicated to the blood-current by the heart, produces a second rise, generally half-way along the down stroke. This rise, which marks the arterial element of the pulse phenomenon, bears a relation to the up-stroke which is not affected by the mode of applying the instrument, and it is, therefore, of great value. The chief points of practical value which the sphygmograph shows may therefore be enumerated as follows. The force and freedom of the ventricular impulse in relation to the state of the arteries ; the condition of the coats of the arteries in relation to the question of their rigidity or elasticity ; the condition of the muscular coats of the arteries as indicated by the power of contraction possessed by the vessels and their excitability, as evidenced by the quickness and extent of their contraction as a reaction on the impression produced by the heart's action. This contraction is a true reflex acting through and in the vaso-motor system. The question of blood tension is also, as it were, raised, and partially, though not fully, discussed by the behavior of the needle of the sphygmograph. Enough, therefore, may clearly be learned by the use of this instrument to render it of high practical value even to the busy practitioner, and it is of interest to the progress of our art that it should be generally employed. The discredit into which it has fallen has resulted from the not unnatural enthusiasm of its introducers, who made too much of it, and exaggerated the importance, while they misconstrued the nature, of the lessons it has to teach, and the aid which, when rightly used, it can render.

The Nerve Element in Whooping Cough.

The *Lancet* says: Of late years the profession has bestowed very little, if any, serious scientific attention on some of the commonest of common maladies. Whooping-cough is conspicuously among the neglected ills to which, notwithstanding the forgetfulness of the multitude of earnest clinical investigators, flesh is still heir. Many years ago the nerve-element in this troublesome and too often evil-working, if not in itself dangerous affection, engaged much consideration, and treatment was specially directed to its relief. It would be well if the investigation of this feature of the etiology of the affection could be resumed. The fact that pertussis belongs to the class of maladies which are communicable and "catching" does not take it out of the range of probability that the specific action of a morbific poison on the nerve centres may be the efficient cause of the disease. Although the occurrence of the affection happening rarely more than once in the life of any individual may seem to point more directly to the fertilizing of latent germs in the organism than to any special excitation of the nerve centres, we do not, as yet, know enough of the *modus operandi* of morbific influences—"germs," or poisons as we may call them—in the blood and the tissues to define the part which the nerve centres play in the production of morbid phenomena. In any case, such relief is frequently obtained, even in the earliest stages of whooping-cough, from mild periodic counter-irritation over the whole length of the spinal column by a mustard poultice, which merely reddens the skin without vesication, that it would be well worth while to study this method closely from the therapeutic as well as the clinical standpoint. It certainly does good ; but how? In cases where the mustard poultice, applied for six or eight minutes—not longer—over the whole length of the spine immediately before putting the child to bed, every night, for a week, or, in seriously spasmodic cases, a fortnight, does not procure a permanent amelioration of the cough, the effect of this remedy is enhanced by sponging the spine with iced water quickly, each successive morning. In cases where the paroxysms of cough seem to be repeated and to continue from sheer exhaustion of the nerve centres, coffee, administered as a drink, will often stimulate the energy of the centres so as to put an end to the malady. These are practical points which require theoretical explanation.

Delirium Tremens.

At a recent meeting of the Cambridge (Eng.) Medical Society (*Lancet*), Dr. Latham introduced the subject of the treatment of delirium tremens. He thought the subject offered scope for considerable difference of opinion, and was a suitable one for general discussion. He referred, first, to sleeplessness as a prominent symptom, and said that if sleep were obtained, recovery generally ensued quickly. Was the induction of sleep, then, a *sine qua non* in treatment? If sleep did not ensue, subarachnoid effusion and coma were likely to follow in some cases, while the majority might recover ; but Dr. Latham thought the disease ought to be treated actively, and that dangerous remedies might be used with advantage to patients. He divided cases of delirium tremens into three clases: (1) Patients in moderate health who had used stimulants in excess ; (2) those in robust health who had indulged after excitement or distress, chiefly young men ; and, (3) those broken down in health, and with damaged organs. The first class he thought could be treated with opium, without risk, provided the urine was free from albumen ; and he had been surprised to find albumen in the urine in a large proportion of cases without any other

indications of kidney disease, and the albumen disappearing as the patient recovered. If albuminuria existed, the use of opium or morphia could only be pernicious. The first thing to do was to give soup, beef-tea, and alcohol in nearly the accustomed doses for twenty-four hours, and then opium; having previously given, if necessary, a dose of calomel. He advised the hypodermic injection of morphia, first in half-grain doses, and then in doses of one-quarter-grain every half hour till sleep was procured or the patient was distinctly under its influence, as shown by the condition of the pupil. He believed diminution in quantity of stimulants taken by the patient to be an early symptom, and not a cause of the disease. In the second class he advised, not opium, but henbane. He had given bromide of potassium in forty-grain doses every four hours, and found the tincture of henbane in doses of one drachm every four hours succeeded better. He also thought that Merck's preparation of hyoscyamine would be useful, but had not yet given it a trial. In the third class he thought opium should be given with great caution, and that the free administration of stimulants was important, even as large doses as those customary with the patient. He mentioned a case in which a gentleman, in his eager desire for insensibility, had taken 240 grains of chloral and the same quantity of bromide of potassium at a dose, and survived after very free action of the skin, bowels, and kidneys. He deprecated the use of large doses of digitalis, as suggested by Dr. Jones, of Jersey. Mr. T. Hyde Hills, speaking from his experience as a jail surgeon, thought leaving off stimulants was a cause of the disease, and that many prisoners became delirious after admission, owing to this deprivation. He advised giving the usual amount of alcohol to which the prisoner had been accustomed, and thought chloral of benefit. Mr. Hodson thought that the combination of chloral and capsicum was useful. Dr. Smith alluded to the usefulness of cold sponging of the body, as a means of inducing sleep. Dr. Latham, in reply, stated that he recognized the capsicum in confirmed cases; it was much esteemed in India. In young men he approved of Dr. Graves' plan of giving antimony and opium every two hours.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——We have received the eleventh annual report of the Philadelphia Dispensary for Skin Diseases.

—— "A Case of Prolapse of the Laryngeal Sac," by J. Solis Cohen, M D., comes to us in the form of a reprint from the *Archives of Laryngology*, Vol. III, No. 1, January, 1882.

——"An Experimental and Clinical Inquiry into the Etiology and Distinctive Peculiarities of Traumatic Fever," by B. A. Watson, M.D. This comes to us in the form of an extract from the Transactions of the American Medical Association.

——"Preliminary Observations on the Pathology of Sea Sickness," by J. A. Irwin, M.A. Cantab., M.D. Dub., comes to us in the form of a reprint from the *Lancet*. In this pamphlet the author (who is preparing a work on sea-sickness) lays before the profession the substance of some novel views which he entertains upon the pathology.

——"Abortion and its Lessons," by O. E. Herrick, M.D., a reprint from the *Michigan Medical News*. In this article, the author takes the ground that when a good cause exists, abortion is justifiable. He considers injections used immediately after connection the surest means of preventing conception.

They should be used with a vaginal syringe, with a large speculum pipe as large as an ordinary glass tubular speculum, with the rubber bulb attached directly to the end of the speculum pipe and no rubber tubing intervening.

Plain water will not answer, but if carbolic acid is added to it, it will often prevent conception. After injecting the liquid, the rubber bulb of the syringe should be allowed to expand, when all the contents of the vagina will be drawn into it.

BOOK NOTICES.

An Index of Physiology. By L. Ashley Faught, D.D.S., late lecturer on Physiology in the Philadelphia Dental College, etc., etc. pp. 120. Press of Wm. H. Hoskins, 913 Arch street, Philadelphia. 1881. Price $1.00.

The author claims that this is the smallest book on physiology ever published, and we imagine he is right. In his title he modestly claims for his production the merits only of an index, and as such we can commend it. Those who can afford to buy it will probably not learn much that they do not already know, but a glance through its pages may assist them in their further study of the more elaborate volumes on the subject.

Home and Climatic Treatment of Pulmonary Consumption, on the Basis of Modern Doctrines. By J. Hilgard Tyndale, M.D., Member N. Y. County Medical Society, etc., etc. pp. 174. New York: Bermingham & Co. 1882. Price 50c.

This volume is a resume of the therapeutics of all progressively destructive processes of the respiratory organs which do not occur successively and rapidly in the train of acute inflammations of the lung. It is a good book, well worth the small price asked for it.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

SYPHILITIC CACHEXIA.

It frequently happens, more particularly in systems previously broken down by intemperance or neglect, that syphilis fails to run its usual course. Instead of (as the books tell us it does) eventually getting well of itself in time, after running an active course for some weeks or months, maybe a year or more, some of its manifestations will settle down into a slow, chronic, indolent condition, as it were, and will seem as though they intended to remain forever. Thus *lupus* may have been the chief outward manifestation of the disease. After some months these sores may degenerate into indolent ulcers, over the surface of which may form a hard, elevated, scaly scab, underneath which there is a constant secretion of pus, which, oozing out from some little portion of the scab, will repulsively soil the underclothing.

Or rheumatism in all the joints may remain, to remind the man of his folly, after all the outward manifestations of the disease have disappeared. There are numberless souvenirs of this disease that may exist in the chronic condition referred to, when, from collateral considerations, we have good reason to believe that the active specific poison has lost its virulence, or has been removed from the body. In such conditions, anti-syphilitic treatment, the various forms of mercury, the iodides, tonics innumerable, have all been tried, and yet the obstinate symptoms continue, as uninfluenced by treatment as though you had prescribed *aqua pura.*

If now you will use the compound decoction of sarsaparilla, made according to the Pharmacopœia, in a majority of cases you will derive astonishing results. This treatment of syphilitic cachexia, more particularly of syphilitic rheumatism, has been recently brought into notice again by a writer in an English journal, and it promises great things in this obstinate condition. We do not mean to treat syphilis with it, but do recommend it in this after condition. If chronic ulcerations exist, it will be necessary, in addition, to touch them occasionally with a point of lunar caustic.

This decoction contains sarsaparilla, bark of sassafras, guaiac wood, liquorice root and mezereon. To commence with, six ounces should be taken three times daily, and this may be gradually increased to eight or ten ounces. How it acts we do not, of course, know. Professor CARSON was wont to ridicule the idea of sarsaparilla purifying the blood, because he laughed at the idea of the *blood becoming impure.* Whether he was right or wrong we will not judge, but we can say positively that compound decoction of sarsaparilla is a very valuable remedy in syphilitic cachexia.

Not only will this decoction be found useful in the condition indicated, but it has also been frequently found beneficial in those indefinite conditions of ill health when no particular disease can be said to exist and yet the individual is not well. It has been found useful in the frequent slight derangements of the aged. and will relieve that condition of malaise so frequently supervening upon imprudence and excess in eating or drinking long continued, but where it has not yet produced any definite disease.

SCHOOL BUILDINGS.

From a report of the Board of Education of Cleveland, Ohio, we are glad to note that the sanitary construction of school houses is about to claim the attention that it deserves. Too much care cannot be bestowed on this important point. When we reflect that the majority of children spend the greater portion of their early active lives in school, it will be evident to all thinking men that these buildings should be so constructed as to remove all possibility of disease from bad sanitary arrangements. The majority of our private school buildings, in this portion of the country, are old; they were built at a time when but little thought was given to hygiene or sanitary science; hence, while fairly well constructed, they lack, at least the majority of them do, the appliances for preserving health that our latter-day acquaintance with sanitation renders possible. Our public school system in Philadelphia is one of our prides, and is excellently well organized; the buildings are large, handsome and commodious. But in some features they lack the very points toward which the Cleveland School Board are directing their attention. For one thing, they are very high, three and four stories. The Cleveland Board recommends two-story buildings. In order to carry out their reform, they have addressed a circular to architects, offering a premium of five hundred dollars for the best plan of a two-story school house, based on sound sanitary principles. For their guidance the following points are mentioned:—

1. Rooms of size to afford fifteen square feet of floor per pupil, that is, nine hundred square feet for about sixty pupils.

2. Window space not less than one-fourth of size of floor.

3. Height of room not to exceed fourteen feet.

4. Ventilation to introduce not less than thirty cubic feet of fresh air for each pupil per minute, and remove an equal amount of foul air, from the level of the floor.

5. Heating arrangement so connected with ventilation as to secure even temperature, that shall not differ materially in different parts of the room, and air to so enter as not to expose any of the pupils to unwholesome drafts.

6. Water-closet accommodation to be abundant, well ventilated, and the building thoroughly secured against sewer gases.

Realizing how readily inherited diseases lying dormant in the system may be roused into future activity by unhealthy conditions and surroundings in school, this action sets a good example, that all cities will do well to follow.

In Boston an active effort, with good prospects of success, is being made to secure sanitary inspection of schools. It cannot be too frequently urged upon the public, by physicians, that prevention is infinitely cheaper and much more satisfactory than cure. The large majority of human beings know but little and care less about hygiene. They regard it as a science beyond their comprehension, and pass it by. They should be taught that while the more intimate minutiae of sanitary science require, for their proper understanding, some knowledge of the science of medicine, yet there is a great deal that they can understand and that they ought to know. It will be much more satisfactory, in the long run, if, by proper precautions, children are kept healthy, than it will be, if by neglect of them they grow into semi-invalid men and women, burdens to themselves and to others.

PROFESSIONAL LIBERALISM.

View it as we may, there can be no doubt that in ethics the profession of medicine is much less conservative than it was a few years ago. Progress is so gradual that those who live during a period of changes fail thoroughly to realize them, since they come one by one, allowing time for custom to breed familiarity with the first before the second follows on its heels. If, on the other hand, the spirits of Astley Cooper, John Hunter, Chapman, Dewees, Jackson, and Physic, could return for a short time to their ever remembered localities and duties, think for a minute what they would see. Their eyes would become round with amazement, as they read of the utterances of distinguished English physicians, in favor of admit-

ting homœopaths to their consultations. They would see the wife of the distinguished editor of one of our greatest journals herself a distinguished and cultivated physician. They would stand aghast when they heard that the medical profession of one of the greatest States in the world had rendered it officially proper to consult with a sect, the members of which they, in their day and time, avoided and shunned, professionally, with as much or even more care and assiduity, than they did the devil himself.

They would find physicians in good standing officiating as teachers in medical colleges for women. They would be informed that several medical societies of repute had opened the door of membership to female physicians. In time their unsophisticated minds would awaken to the various devices used by their modern confreres to secure practice, and they would be almost paralyzed when they learned how much wire pulling and political intrigue had entered into their beloved profession.

We do not mean to say that this is not all right. We are champions of progress, and rejoice when we see human nature advancing. We merely desire to enable our readers to enjoy with us the real amusement that would be afforded by the puzzled and half incredulous expression that would occupy the faces of these old medical war horses were they enabled to see and hear what we do, and to watch them throw up their hands in astonishment, as they exclaim, "*By the shade of the great Hippocrates, but this is an age of progress,*" as they vanish from sight into the dim mist of uncertainty, born of their doubts as to whether all this seeming progress will redound, in the end, to the real and substantial advantage of their ancient profession.

Notes and Comments.

Cucumber or Carbolic Acid.

The *British Medical Journal* says: America is suffering in a very marked degree from the pollution of drinking water, which is so apt to be the Nemesis of the accumulation of great city populations, unless primary regard be paid to scientific sanitation, and especially to the supply of pure drinking water, as well as the preservation of purity in the soil and air. The drinking water of the great cities of America appears to be in some instances little better than sewage water, and in numerous cases the pollution of potable water in great cities is such as to cause, at the present moment, considerable disgust on the part of city residents, and to call for government intervention, which is unfortunately slow, and not always satisfactory in its action. From comparative results which have been published by Dr. A. R. Leeds, in the *Chemical News*, it would appear that the water at Newark, Jersey City and Hoboken had become suddenly noticeable for the highly marked flavor of carbolic acid, indicating that the pollution of that particular water supply was at that moment of an especially chemical nature. When the board was made aware of the nuisance, it was ingeniously urged that water was all the better for being polluted with carbolic acid, inasmuch as it served to disinfect the other kinds of filth which got into the drinking water. This plea, however ingenious, was not held to be good in law, and so, for the moment, the inhabitants of Newark, Jersey City and Hoboken have to drink their potable water without the preliminary disinfection, which made it more unpleasant to the taste, if less noxious to health. Boston is suffering from what is described as a striking and interesting and scientific peculiarity. Its drinking water shows albuminoid ammonia to the extent of 0.0605, a statement which analytical chemists and medical officers of health will read with grim surprise. It is stated, however, that the peculiar interest is, that this is due, first, to the pollution by a few manufacturing towns, and, secondly, to the growth of algæ. There is especially an extremely interesting and rare freshwater sponge, *spongilla fluviatilis*, which accounts for the peculiar "cucumber taste." It is thought that the Boston people would be more reconciled to the "cucumber taste" if they took a little more scientific interest in the *spongilla fluviatilis*, which is accordingly elaborately described and figured, and recommended as an object of interest under the microscope. Another source of pollution of the Boston water is Pegan Brook, which flows through a town of ten thousand inhabitants, almost entirely engaged in the dressing of leather and manufacture of shoes; the outflow from which factories is supposed to complicate the "cucumber flavor." Philadelphia and New York also, it appears, receive their water from polluted sources. The feeders which empty themselves into Croton Lake, the

principal reservoir of the New York water, pass through a settled country, with numerous tanneries, factories, etc., along their banks. Wilmington, Del., also ranks among the towns supplied with polluted water. Under these circumstances it is satisfactory that an energetic effort is promised to maintain the public interests and to protect the public health by improving the sources of water supply, and guarding them against contamination; and, meantime, it is not surprising that Apollinaris water is stated to have become so general a favorite in the United States, that its consumption there as a daily table water equals that of Great Britain.

Headaches in Children.

Dr. Day read a paper on this subject before a recent meeting of the Harveian Society, of London (London *Lancet*). He alluded to the two great causes of headache, from a pathological point of view, viz: cerebral anæmia and cerebral hyperæmia. He said that habitual headaches in children indicate an irritable and exhausted brain, and if intellectual exertion be carried too far in such cases, mischief is soon likely to ensue. If intellectual exertion be carried beyond a certain point, the brain becomes anæmic, fatigued, and the nutrition in the ganglion cells of the cortex becomes impaired, diseased, or in some way altered from health. The author referred to neuralgia, or one-sided headache, which he said was more common in children than was generally supposed. He had known headache in connection with chorea and dental caries. Dr. Cheadle considered foul air and gas were the chief causes of study-headache; he referred to headaches in rickety children. This occurred just after the skull closed, was continuous, but gradually subsided. Dr. Mackenzie particularly insisted on the importance of careful examination of the eyes in cases of headache of children. Muscular asthenopia was a cause of headache which sometimes was mistaken for serious organic disease. He mentioned the case of a schoolboy brought to him under this supposition, but myopia was found and corrected, and the headache disappeared. The same thing occasionally occurred with hypermetropia. Next he pointed out that ear disease was sometimes the cause of headache; which is important as significant of commencing meningeal or cerebral inflammation. In all cases, therefore, of headache in children, it is very important to examine the ear and the eye, using the ophthalmoscope, which will be of great value in detecting organic disease. He remarked that pain in the head, a valuable sign of tumor of the brain, was no certain indication of localization of the tumor, unless there was corresponding pain on percussion. The President, in conclusion, said that headache, though not a common symptom in children, was one of import, and frequently indicated advanced disease.

Acute Farcy in Man.

At a recent meeting of the Pathological Society of London (*Medical Times and Gazette*), Dr. Howard Bendall said this was the case of a healthy man, who was inoculated from a horse suffering from farcy. When first seen he was suffering from multiple abscesses, which were chiefly situated in the neighborhood of the joints. Shortly afterward the characteristic pustular eruption appeared on the skin, and signs of pneumonia supervened, accompanied by dyspnœa. The dyspnœa rapidly increased, and the patient died comatose. The objects of chief interest at the autopsy were the lungs. These were both deeply congested, the left lung showing, in addition, extensive lobular pneumonia of the left base. Microscopically, the lungs were crowded with fatty emboli; hence the intense dyspnœa. In addition to this, the pus from the abscesses was found to contain free oil in considerable quantity, while sections from the neighborhood of the ulcers on the skin and mucous membrane showed the tissues to be in a state of rapid necrosis, in which almost all the cell elements had disappeared. The tissues in these parts were loaded with amorphous fat granules, of all sizes. Dr. Coupland had seen a similar case about ten years ago. Dr. Bendall called this case "farcy," because the nasal symptoms came on early, and were the most marked feature of the disease.

Pregnancy Complicated with Epithelioma.

At a recent meeting of the Obstetrical Society of London (*Medical Times and Gazette*), Dr. Edis asked for an expression of opinion on the following case: A woman, aged twenty-nine, married seven years and nine months, mother of one child eighteen months old, came as outpatient, on account of pains and sanguineous discharge, and was found to be six months pregnant. The whole of the cervix, and the posterior wall of the vagina down to within an inch and a half of the perineum, was affected with epithelioma. The cervix was dense, nodulated, rough, but did not bleed very readily. The whole disease

could not be removed by the Porro-Freund operation, and the question was whether to induce premature labor, or to let the patient go to term and perform Cæsarean section.

Dr. Wiltshire thought that if the disease had extended down the posterior vaginal wall nearly as far as the perineum, Porro's operation would fail in removing it. He mentioned a case of excessively dense cancer of the cervix, in which he preformed Cæsarean section, some years ago, but in which Porro's operation would have been admissible had it been then in vogue.

Dr. Herman said that published cases showed that the consistence of the growth was of more consequence, as regards delivery, than its extent. Living children had been borne after quick and easy labors, although the whole circumference of the cervix and vagina was cancerous; and, conversely, cancer of small extent might, if very hard, cause great obstruction.

Dr. Priestley agreed with Dr. Herman, that the consistence of the growth was of most importance. He did not think the case suitable for Porro's operation, as the child was not viable at the sixth month, and the mother's life could hardly be prolonged by it. He would chiefly regard the child's life, and would be disposed to let the woman go to full term, or nearly so, and then act according to the amount of obstruction found to exist.

Iodine in Typhoid Fever.

Dr. N. S. Davis, in the Chicago *Medical Journal and Examiner*, says, "To more effectually counteract these morbid changes (in typhoid fever) we need some remedy capable of exerting a general alterant and antiseptic influence, and maintaining it for a considerable time without depressing the strength or creating local complications. The last time I took you to the bedside of typhoid fever patients, I called your attention to the effects of iodine, which I had then commenced giving. Since then I have continued to use the remedy in all well marked cases of typhoid. I have now used it in fourteen cases. Nine of this number were brought under treatment during the first week of the disease; the other five not until the first half of the second week. The treatment in all consisted in the administration of from 12 to 15 minims of the following solution of iodine:—

℞.	Iodinii,	gr. viij
	Potassii iodidi,	gr. xxx
	Aquæ destillatæ,	f℥ iss. M.

"The dose was generally diluted with two tablespoonfuls of sweetened water, and repeated every four hours, for the first three or four days, and then every six hours until indications of convalescence appeared. From my present experience I am led to think it is a remedy of great value, especially when its use is commenced in the forming stage, or during the first week after the confinement of the patient from the development of the fever. I am not using iodine as a *specific* curative agent in typhoid fever, but simply as a general alterant and antiseptic, adapted to fulfill certain rational indications afforded by the pathology of the disease, and always to be aided by such collateral remedies as the abdominal or other local symptoms may indicate."

Genital Irritation.

At a recent meeting of the New York Neurological Society (*American Journal Neurology and Psychology*), a paper entitled "The Effect of Genital Irritation in the Production of Reflex Nervous Symptoms" was read by Dr. L. C. Gray, of Brooklyn. His conclusions were as follows:—

1. That there is no proof that genital irritation can produce a reflex paralysis.

2. That while it is probable that the slight nervous disorders, as incontinence, retention, difficult micturition, erratic movements, and slight nervous disturbances, can be produced by genital irritation, the proof is not yet complete.

3. That operations for the removal of genital irritation may be beneficial even in organic nervous disease.

4. That we should, therefore, remove such genital irritation, if it exists, in any case whatsoever, and thus give our patients the benefit of the doubt.

5. That in all cases of nervous disorders, with accompanying genital irritation, we should not regard the latter as the cause of the former until all other probable or even possible causes have been rigidly excluded.

6. That operations upon the genitals, even when there is no genital irritation present, may prove to be a useful therapeutic measure in certain cases.

Ergot for Enlarged Spleen.

Dr. W. E. Manuel contributes the following case to the St. Louis *Courier of Medicine*. He was called to a gentleman 43 years of age, with an enlarged spleen, covering nearly the entire abdominal cavity and extending as far back as the border of the liver.

Two weeks before the spleen had commenced to enlarge. It was very firm, hard and painful. No malarial origin of this enlargement could be discovered. He was very much reduced in weight and extremely weak. He was also suffering with nephritis. The urine was of a dirty, brownish appearance, filled with sediments, the chief of which were phosphates and urates, while it was loaded with albumen. Subsequent events proved that the pressure of the enlarged spleen accounted in a certain degree for the albuminuria. The treatment was commenced with thirty minim doses of Squibb's fluid extract of ergot, three times a day, to be gradually increased until the dose reached sixty minims. In three days the spleen had lost a great deal of its hardness and was flabby to the touch, though not noticeably reduced in size. In one week there was a perceptible diminution, and from that time, day by day, he could perceive a marked diminution, until it has now returned to almost its normal condition. With the reduction of the spleen, the kidneys became decidedly better, the albumen almost entirely disappeared, and with buchu, uva ursi, and copaiba, taken as the spleen reduced, his urine began to clear up.

Poisoning by Yellow Aconite.

The *Medical Times and Gazette* has the following: "A lady had a bunch of freshly cut flowers of the yellow aconite in a glass of water on the table in her drawing room; a pet dormouse belonging to one of the children was running about on the table, over the child's hand and arm. The child said the dormouse was thirsty, and she took her little thimble, filled it with water from the glass, and offered it to the dormouse. The animal drank it readily. In a minute or two it fell over on its back; and after a short struggle, died on the table." The yellow aconite would thus seem not to be quite so inactive as has been assumed.

Hypnotism.

The Paris special correspondent of the *Lancet* says: M. Milne-Edwards, the president of the commission appointed by the Academy of Sciences to report upon M. Dumontpallier's experiments on hypnotism, read a short note on the subject, which will probably bring the inquiry to an abrupt termination. He stated that Professor Harting, of Utrecht, had communicated to him the results of similar experiments made on rabbits, fowls, guinea pigs, pigeons and frogs. The six fowls submitted to hypnotism on several different occasions died of paralysis. M. Milne-Edwards announced that he would carry out analogous experiments at the Jardin des Plantes, but that they must be considered as too dangerous to be performed upon human beings, without considerable circumspection. M. Vulpian had already marked his appreciation of this kind of inquiry by withdrawing from the commission. Whether there is really any immediate risk to a hysterical girl from the treatment she receives in a Paris hospital may be open to doubt, but there can be no question that, in the long run, it is extremely injurious.

Nasal Calculi.

In our issue of March 11th (on page 271) we offered a note on this subject, from the St. Louis *Medical and Surgical Journal*. From a subsequent issue we notice that Dr. Porter stated to the St. Louis Medical Society that he knew of a most interesting specimen, a foreign body, which was removed from the nose of a gentleman of that city. He had chronic discharge from the right nostril, and had been well treated by others, and when examined it could not be ascertained why he did not get well; but on watching the case a little further, it was found not to respond to the usual methods of treatment. One day he discharged from the antrum (there was no doubt of the locality), a little mass which was found to be an embryonic tooth that had been pushed into the antrum, and had doubtless remained there many years. This gentleman said that he had this discharge from boyhood, and was 38 years old. The discharge of this foreign body completely relieved him.

Foreign Bodies.

In a recent issue we noted a case in which a grain of corn was discharged through the chest; commenting on this case Dr. Wilks, President of the Pathological Society of London (*Lancet*), recently read a letter from Dr. Francis Darwin, stating that he knew of horns of grass and corn which had pierced the various organs and parts of animals. In South America a grass-seed works its way right through the skin of the sheep. In Australia the fruit of a grass works its way through the chest and abdomen of animals, and into the heart, lungs, liver and kidneys. These two grasses are adapted to working down into the ground under changes of temperature and moisture. The horns and barbs on the ear of corn in Dr. Wilks' case are directed backward, and therefore any movement forces it on, and cannot make it recede.

Special Reports.

NO. V.—OPHTHALMOLOGY (Continued).

BY CHAS. S. TURNBULL, M.D.

On the Extraction of Cataract—Knapp's Modification of Graefe's Peripheric-linear and Wecker's Flap-section, with Peripheric Capsulotomy and Subsequent Discission of the Capsule.

Both observation and experience induce us to recommend what is known as "Knapp's modification" of the operation for the extraction of cataract,* and, as we consider his method of sufficient interest and importance, we quote his own words and describe the details of the operation somewhat at length, in the hope of tempting the more progressive, and especially the younger, members of the profession to give this method a fair trial, with the full assurance that it offers more advantages and less disadvantages than any other, and, on the basis of statistical data, claims a peculiar influence on the final object of all operations for cataract—the restoration of sight.

In a recent lecture† Knapp makes a synopsis of *thirty extractions*, which serve as a basis for the following remarks, in the course of which he describes in detail the steps of his operation; and we have added cuts of most of the instruments he employs:—

"The *youngest* patient was a servant girl, aged thirty-two years, whose cataract I would, under ordinary circumstances, have operated on by division, but as she was blind in both eyes, had only recently come to this country, and was without support, I preferred that operative procedure which restored her sight in the shortest time. There were three patients between forty and forty-eight years of age; the remainder were over fifty. The oldest was eighty-two.

"The *method* was a *more or less linear or low-flap section, with a broad iridectomy, and peripheric opening of the capsule.* In the first operations (Fig. 1), Graefe's section begins and terminates one millimeter in the corneo-scleral junction, its apex being at the transparent margin of the cornea, or even one to two millimeters below it. Gradually I shifted into the flap-section (Fig. 2), which De Wecker, of Paris, recommends as the best, namely, a section with a Graefe's knife, situated exactly in the transparent margin of the cornea, extending over its upper third.

FIG. 1.

FIG. 2.

For full-sized cataracts, I made it somewhat larger. Both sections—the linear and the flap—have their advantages and their disadvantages; the linear does not incline to tilting, and shows a very accurate coaptation, but as its ends are nearer to the insertion of the iris, it is more liable than the flap to adhesions and incarcerations of the iris and to cyclitic processes. With regard to firm closure of the wound, one of the most important factors in the whole operation, the flap, though easily gaping during the operation and soon after it, has one redeeming quality—it cuts the lamellæ of the cornea obliquely, not at right angles, as the linear section does. This principle of oblique piercing is frequently made use of, and with admirable ingenuity, in the animal organism. Let me only mention the ductus choledochus piercing the wall of the duodenum obliquely, by which contrivance the bile can, without obstacle, flow into the gut, but the food, while passing from the pylorus onward, will press the inner wall of the valve-like opening of the bile-duct against the outer, and thus completely close the aperture. Somewhat in the same manner the inner lip of the flap-section is pressed against the outer by the contents of the globe, whereby a firm and lasting closure may be established. Theorizing is a fine thing in its way, but worthless without the test of experience, because in complicated problems we commonly fail to know and appreciate the quality and quantity of all the coöperating factors. Wecker's section has thus far shown us very kind healings, encouraging to further trial."

The most approved form of speculum, *i. e.*, Graefe's modified, is shown by Fig. 3. The arms are curved so that the loop of spring and adjusting screw are out of the operator's way. There is a right and left speculum. Fixation forceps by Fig. 4, and a typical Graefe's cataract knife, by Fig. 5.

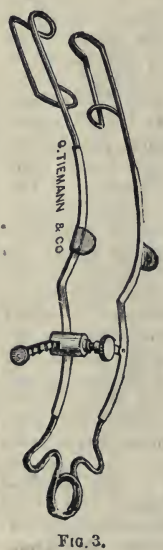


FIG. 3.

FIG. 4.

FIG. 5.

* Knapp's previous report of a hundred cases of extraction (the sixth hundred), published in the July number, 1879, of the *Archives of Ophthalmol.*, refers to 66 successive cases of extraction with peripheric capsulotomy, and, together with the preliminary communication in Vol. vi, and later in Vol. x, No. 3, contains the substence of his views and experience on this subject, also historical and critical remarks on the peripheral opening of the capsule.

† On the Extraction of Cataract. By Herman Knapp, M.D. The *Medical Record*, New York, Feb. 18th, 1882.

"The *iridectomy* in almost all of our operations was large. The coloboma varies from ½ to ¾ of the corneal circumference. When the corneal section and the opening of the capsule are peripheric, it must be large, or the columns of the coloboma will be an obstacle to the exit of the lens, which, if overcome by force, entails bruising and incarceration of the iris. When the iris is being cut, it ought not to be dragged with the iris forceps (Fig. 6) into the corners of the section, since there the lips of the wound act like clamps, holding the iris-tissue tight between them. It is good practice to seize the iris in the centre of the section, draw it straight up and cut it off close to the cornea—carefully avoiding the corneal tissue itself—in one, two, or three strokes of the iris scissors (Fig. 7), as may prove convenient, and afterward, according to the sufficient or insufficient size of the coloboma, either reduce or exsect iris tissue which may still lie in the corners. Such tissue, even after a clean and apparently satisfactory iridectomy, remains hidden in the wound more frequently than we imagine. Proofs: 1. The anatomical examination of eyes on which iridectomy had been made for glaucoma, or combined with cataract extraction, commonly found the stump of the iris or its adjacent tissue united with the corneal scar, even if no outward inspection could discover such a condition. 2. Many times, when passing the cystotome from the corners of an apparently unobstructed corneal section toward the centre, I drew iris-tissue along, which was either the periphery of the adjacent iris, or the stump of the part which had been removed. Such portions, of course, have to be grasped with the forceps and cut off. This observation has taught me not to rest satisfied with an apparently correct coloboma, even if its sphincter edges are in the anterior chamber, but, before opening the capsule, to clear the whole extent of the corneal section, especially the corners, of iris-tissue, which, with a delicate probe or spatula, may be stroked back into the anterior chamber."

FIG. 6.

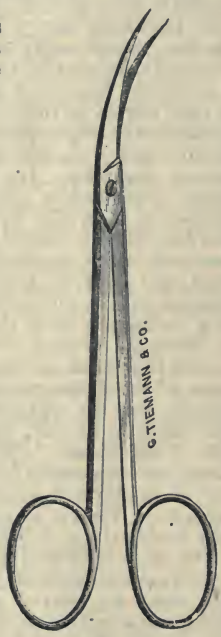


FIG. 7.

"When the wound is clean the operator takes the fixing forceps in his own hand, presses gently with it on the globe, so as to make the corneal section slightly gape, and *passes the needle cystotome* (see Fig. 8) *from the inner corner of the section to the outer, through the anterior capsule of the lens.* This manœuvre has to be closely watched; a far-sighted operator should make himself near-sighted by convex spectacles, and either daylight or artificial light ought to be thrown on the eye by a large convex hand-lens, so that the point of the cystotome can be accurately followed in its course through the capsule. An insufficient capsulotomy is commonly without consequences, as the cataract on its way out enlarges the opening; only in tough capsules it is an obstacle to the expulsion of the lens, and may lead to prolapse of vitreous. When I had practiced this mode of opening the capsule in about two hundred cases, I varied it, not because I was dissatisfied with its results, but in order not to get wedded to one particular procedure. There is no conceivable way of opening the capsule that has not here and there been tried. The one just described is the simplest in execution, and the least injurious to the eye, but it has the disadvantage of necessitating, in the majority of cases, an after-operation, viz: the subsequent central splitting of the capsule. In order to avoid that, I have lately joined to the horizontal division a larger vertical one than I made a few years ago while practicing a T-shaped opening. A *bent needle cystotome* (Fig. 10) is introduced into the anterior chamber, and the capsule slit open from the lower edge of a middle-wide pupil, up to the centre of the corneal section. In order not to let the outcoming lens enlarge the upper end of the capsular wound irregularly, I made the horizontal incision in one case with a delicate, sharp-pointed scalpel, the point of which was inserted into the upper end of the vertical incision of the capsule at the centre of the corneal section, pushed forward toward one corner of the wound, and then, by raising the hilt, one-half of the upper margin of the capsule was ripped open. In the same way the other half was dealt with. In another case I made the horizontal incision of the capsule with the needle cystotome, which was passed first from one, then from the other corner of the corneal section through the capsule, so as to meet the upper end of the vertical capsular section. If the cystotome were passed

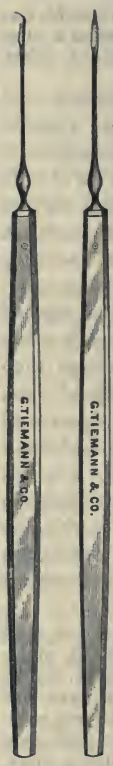


FIG. 8. FIG. 9.

FIG. 10.

from one end of the section to the other, it would split the first half of the capsule, but most likely not the second, for when fallen into the vertical section, it would enlarge this by dragging the capsule before it rather than cut it. The few cases thus operated on did well; the first one showed some transient adhesions of the iris to the shreds of the capsule. It remains to be seen whether a greater number of cases will yield as smooth recoveries, and better permanent vision than the other now well tried method.

Fig. 11.

"The *expulsion of the lens* is effected by pressing with a hard rubber spoon (Fig. 11) on the lowest part of the cornea.

"The *after-operation*, the subsequent central division of the capsule, is an essential feature in this mode of operating for cataract. Without it the method could not stand, as it has also virtually been abandoned by the operator who first, in 1873, tried it on a larger scale, namely, Professor Gayet, of Lyons. He made no after operations, and was dissatisfied with the imperfect visual results. The empty capsule will wrinkle and opacify, requiring subsequent splitting, in the majority of cases. But then, the visual results are permanently good, and better than by any other method, except the removal of the lens within the capsule, which, according to its warmest advocate, Dr. Herman Pagenstecher, is indicated in thirty per cent. of the patients only.* But do the methods with central opening of the capsule, even in their successful cases, commonly yield good vision permanently? By no means. With them, too, the capsule will wrinkle and opacify, and vision be reduced to a surprising degree.

"The subsequent division of the capsule comprises not only its anterior, but also its posterior half, and, therefore, gives a perfectly unobstructed pupil. The imperfect visual results, after the primary central division of the anterior capsule, have always been felt by the profession, and given the incentive to different attempts at obviating this disadvantage, among which I will mention the puncture of the vitreous, immediately after the expulsion of the lens, which Professor Hasner, of Prague, has made for many years, and which, as I saw last summer, has been adopted, on trial at least, by Schweigger. Both gentlemen assert that this procedure is not dangerous, but neither has, as yet, published statistics to convincingly support their assertion. The subsequent division of both capsules is an innocent operation; I have done it more than a hundred times. Only in a few cases the reaction from it lasted longer than a few days, and never was the vision made worse. The technique of the operation, however, is peculiar, and has to be learned. The operation requires, above all, two things, without which nobody should undertake it: first, *good artificial light*, thrown on the eye with a large lens, so that during the operation every wrinkle, dot and stria of the capsule can be seen, as well as the course and effect of the needle; second, a *sharp, well-proportioned scalpel needle** (see Fig. 9), with which the capsule can be cut without tearing. I first make a horizontal incision, then a vertical one, varying them, however, according to the conditions of the capsule. No aqueous should, none need escape. I have described it in the *Archives of Ophthalmology*, Vol. VIII, No. 2, p. 200, Vol. X, No. 3, p. 295.

"Now, in conclusion, a word or two on *antisepsis in cataract operations*. I have never thought much of the specifically antiseptic *substances* which ophthalmology has recently borrowed from general surgery, and I cannot yet see any reason to change my opinion. If the adherents of the antiseptic method affirm that this essentially consists in the careful observation of all the rules that secure or at least favor union by first intention, they have no warmer friend than me. Those rules are no modern revelation, and in no operation have they been more carefully studied than in the extraction of cataract. If, however, antisepsis means "bacteria-killing"—to express it in one word—and its advocates assert that all their methods and antiseptic substances employed before, during, and after the operation have this fundamental aim and object, then I think they hunt a phantom. I am far from denying the existence of micrococci and bacteria; they are on and in all open, moist tissues, though the conjunctival sac shows them less than most other places (see Wernich's instructive book, "Die Desinfectionslehre"). I do not, of course, deny the existence of infectious substances, such as blennorrhoic, even dacryocystitic, and similar secretions, as well as decomposed and fermenting bodies; but, gentlemen, these substances are but *one group of irritants*, which, as all the others, ought carefully to be guarded against. Besides them, there are plenty of mechanical and chemical irritants, which have equal claims on our consideration. The great modern dictum, "No suppuration without bacteria," which was until quite recently ardently defended, has proved untenable; even its most zealous advocates had to concede that croton-oil and other substances produced suppuration, without any coöperation of bacteria. One of the latest investigators of this subject, Dr. N. Uskoff, answers the question whether or not suppuration is possible independently of low organisms? positively in the affirmative (*Virchow's Archiv*, vol. lxxxvi, p. 150, etc., October, 1881), and does so, not from theoretical speculation, but based upon numerous experiments made by him and Professor Ponfick, at the Pathological Institute of the University of Breslau. Lister himself, in closing the discussion on this subject, at the last International Medical Congress, said: "Solid bits of dirt are the great sources of danger, rather than certain invisible particles that float in the air, and have, perhaps, been invested with more deleterious functions than they really possess" (*British Med. Jour.*, October 1st, 1881, p. 550).

* On the Extraction of Cataract in its Capsule. By H. Pagenstecher, M.D., of Wiesbaden. *Archiv. f. Ophthal.* Vol. VIII, p. 243, Vol. X, p. 152.

* Reliable needles of this kind, as well as the other instruments, are made by Tiemann & Co., New York.

"The antiseptic methods which have conquered, for good reasons, the greater part of the surgical world, have also many adherents among the first names in ophthalmology. I will mention to you only Wecker, Horner, Snellen, Leber, H. Pagenstecher. Alfred Graefe, whose early paper on the subject, in Graefe's *Archives*, has made so many converts, had the mortification to see that the good results, not to say the good luck, which had attended his earliest antiseptic procedures had unaccountably deserted him later, so that he is said to have become skeptical. Horner stated, in London, that, apart from antiseptic precautions, success depended upon the most delicate execution of every step of the operation. Now, what has *experience* to say on the question of antiseptics in ophthalmology? Where are the all-important statistics to support it? They have not yet come forward. The best operators, *e. g.*, Wecker and Horner, still concede one per cent. to two per cent. of total loss by suppuration. This is a less percentage than the old flap showed, but not less than is obtained by a careful execution of Graefe's extraction, without antiseptics, and the results in this institution, for years, have been no worse. There were two cases of suppuration in the last hundred extractions I reported on. Since then, March 3d, 1880, fifty-two extractions were performed, without the occurrence of suppuration, even without the loss of an eye from any cause. Several larger series of operations, performed under antiseptic precautions, have been published (Just, Reymond and others) which are quite unfavorable. Yet this subject is still under discussion, and, though I am not prejudiced in favor of the bacteria killing contrivances, I shall not tire in giving the question how to secure healing by first intention, how to avoid inflammation in general, my undivided attention. In order not to judge of the subject without personal experience, I shall continue to give antisepsis a fair trial, until facts sufficiently numerous pronounce their unambiguous verdict. Every alternate operation in the thirty cases which were witnessed, and which were the basis of these remarks, was performed under antiseptic precautions. Though I shall have to return to this subject later, I may here state that a difference in the course of healing has not been apparent, and, if asked my candid opinion, I would say that the best antiseptic is twenty years' experience."

That we may do full justice, we quote from no less distinguished an authority than Dr. Herman Pagenstecher (*loc. cit.**) who advocates the *operation of extraction of all mature cataracts in their capsule*, and says, "Indeed, I go so far as to say that we make a great mistake—will the older operators pardon my expression?—when we operate on cataract after irido-choroiditis, or on hyper-mature, or Morgagnian cataracts, in any other way than by extraction in the capsule." He at the same time, by calling attention to an old and well established ophthalmological fact, says he lays down one important rule, which, nevertheless, will bear constant repetition, *i. e.*, "cataracts which have matured rapidly, say in the course of a few months, should never be removed in the capsule, but always by opening the capsule. In some cases the capsule does not obtain sufficient strength in comparison with that of the zonula."

"One reason why (says Pagenstecher) this method has been so little employed is, that every one likes to continue with the operation which he first learned and practiced, and which has probably, so far, given satisfactory results; secondly, everybody imagines that it is a violent procedure to pass the flat spoon into the eye, for the purpose of removing the lens. Then it is a common opinion that loss of vitreous endangers the eye; further, we are told that we are never sure of removing the lens with the whole of the capsule; and, finally, many have never seen the operation, and hence have had no chance for deciding upon its merits from their own knowledge.

"In the first place, it is necessary for us to be sure what cases are to be operated upon by extraction in the capsule, and what cases are not. Our own (P. and his brother, the late A. Pagenstecher) observations, combined with a moderate degree of attention, soon throw light upon this point, and he who at first only ventures to employ the operation in the cases where it is undoubtedly the best, such as cataracts after irido-choroiditis, pronounced hyper-mature cataracts and Morgagnian cataracts, will soon gain more and more confidence in the operation, and discover for himself in what further series of cases it is indicated."

Comment is unnecessary upon this method of extraction of the lens within the capsule, which, says Knapp, "is, according to its warmest advocate, Dr. Herman Pagenstecher, only indicated in thirty per cent. of all cataracts."

*Translated by James A. Spalding, M.D., Portland, Maine.

Correspondence.

Obscure Cases.

Ed. Med. and Surg. Reporter:—

A bright little girl, 11 years old, had a sore throat for a few days and a stiff neck for a fortnight. At this time I first saw her, on washing day, when being up and around she evidently took more cold, and all symptoms were much aggravated except sore throat. Left side all right. Right sterno-mastoid and gland at angle of the jaw much swollen, and also the tonsil and root of tongue, swelling extending up to right eye. Head turned to left and held in constrained position. Voice almost extinguished. Swallowing

difficult, not from soreness but from swelling. Examination of throat impossible. This was on Monday. At my visit on Thursday, found that in previous night something had broken, and patient was spitting bloody pus, with much relief. On Friday better. Did not see her again until Monday, when symptoms were worse. Quick pulse, more fever, pain and tenderness of legs, but no swelling, pupil of right eye much dilated. During night had spit up more bloody pus. While reporting to the mother Watson's case of quinsy the patient cried out, "It is coming," and immediately threw off a large quantity of bright blood. Inspiration drew some into the lungs, and in one or two minutes a general convulsion ended the scene. What was it? Who has seen the like? What could have been done?

CASE 2.—A married woman, aged 31, arose in the morning in usual health, prepared breakfast, and was taken with a "fainting fit." On the previous evening had taken a small dose of castor oil, for constipation and piles. After two hours I found her in complete collapse; very pale, cold sweat, no pulse at wrist, heart beat slow, feeble, but not abnormal. Great pain at epigastrium. Lay on left side and could not turn on to the back. Had missed two menstrual periods and been suffering a long time with leucorrhœa, but without treatment. Had been pregnant only once, and miscarried at three months. Seemed like one suffering severe hemorrhage; mind all right. Ventured a diagnosis of extra-uterine pregnancy or perforating ulcer of the stomach. Brandy failed to rally her, and she died at 4 P.M. same day. Autopsy showed two quarts of blood in the abdominal cavity, and great enlargement of left Fallopian tube, which had ulcerated and showed an opening the size of a dime, its inner surface lined with coagulated blood. The left ovary had developed a serous sac as large as an ordinary hen's egg. There was also a smaller cyst in right broad ligament. These two cases happened within three months, in an ordinary country practice. S. L. CHASE, M.D.

Colchester, Conn.

NEWS AND MISCELLANY.

COMMENCEMENTS.

Jefferson Medical College.

The Annual Commencement of the Jefferson Medical College was held in the Academy of Music, on Thursday, March 30th. The ceremonies commenced with prayer by the Rev. I. L. Nicholson, after which the degree of Doctor of Medicine was conferred upon 247 graduates. The degree of D. D. was conferred upon Rev. I. L. Nicholson, of St. Mark's P. E. Church, and Rev. Charles Maison, of St. James P. E. Church, Kingsessing. The degree of LL. D. was conferred on Dr. Thomas Addis Emmett, of New York. The prizes to the graduates were awarded as follows:—

1. A prize of $100, by Henry C. Lea's Son & Co., for the best Thesis, to Samuel O. L. Potter, of Wisconsin; with honorable mention of the Theses of Charles Meigs Wilson, Hiram R. Loux, and Horace G. Hill, of Pennsylvania; and Henry B. Fergerson, of North Carolina.

2. The "Robley Dunglison Prize" of $50, by Dr. Richard J. Dunglison, for the best research in Physiology, to Edwin Bergstresser; with honorable mention of the Thesis of J. Edgar Belville, of Pennsylvania.

3. A prize of a Gold Medal, by R. J. Levis, M.D., for the best Report of his Surgical Clinics at the Pennsylvania Hospital, to Henry E. Everett, of Pennsylvania; with honorable mention of the report of A. Bern-Hirsch, of Pennsylvania; J. Augustin Herrero, of Porto Rico; and Richard Douglass, of Tennessee.

4. A prize of a Gold Medal, by Thomas G. Morton, M.D., for the best report of his Surgical Clinics at the Pennsylvania Hospital, to Edwin Eareckson, of Pennsylvania; also, a second prize of a work on Surgery, to David H. Melhorn, of Pennsylvania.

FACULTY PRIZES.

5. A Case of Instruments, for the best Essay on a subject pertaining to Surgery, to William Niles Powell, of Pennsylvania; with honorable mention of the Theses of John Franklin Foulkes, of California; James E. Baker, of Wisconsin; and Edwin B. Mathiot, of Pennsylvania.

6. A Case of Instruments, for the best Essay on a subject pertaining to Obstetrics, etc., to Charles L. Whitfield, of Texas; with honorable mention of the Theses of John B. Mahon, of Pennsylvania; and Luigi M. de Jesi, of Italy.

7. A Gold Medal for the best Essay on a subject pertaining to the Practice of Medicine, to Herbert M. Seem, of Pennsylvania; with honorable mention of the Theses of Louis W. Atlee, of Pennsylvania; and Frank E. Wilson, of New York.

8. A Gold Medal for the best Anatomical Preparation, to John Sebastian Miller, of Pennsylvania.

9. A Case of Instruments, for the best original research in the Chemical Laboratory, to Charles H. Ballentine, of Pennsylvania; with honorable mention of the Essays of Horace B. Scott, of Connecticut; and Justin D. Lisle, of Ohio.

10. A Case of Instruments, for the best original research in the Materia Medica Laboratory, to Charles A. Koder, of Pennsylvania; with honorable mention of the researches of A. Rusling Rainear, of Pennsylvania; Jason H. Moore, of Kansas; Isaac E. Clark, of Texas; and Charles A. Service, of Pennsylvania.

11. A Case of Instruments, for the best Essay on a subject pertaining to Physiology, to Charles Z. Weber, of Pennsylvania.

It was announced that at an examination held in June, 1881, diplomas were awarded to John Fruit, Reid C. Matthews, and Oliver P. Stoey, of Pennsylvania.

The valedictory was then delivered by Professor Henry C. Chapman, and after the rendering of another musical selection and the benediction, pronounced by Rev. Dr. Nicholson the audience dispersed.

Alumni Meeting.

The annual meeting of the Alumni Association of the Jefferson Medical College was held March

29th, in the hall of the college building. Professor Samuel D. Gross, president of the Association, called the meeting to order. Letters from members abroad, regretting their inability to be present were read, after which the report of the treasurer, Dr. Hatfield, showing the expenditures of the year, was read. The following officers were elected to serve during the ensuing year: President, Professor Samuel D. Gross; Vice-presidents, Drs. E. B. Gardette, Ellwood Wilson, A. Hewson and R. J. Levis; Treasurer, Dr. N. Hatfield; Recording Secretary, Dr. T. H Andrews; Corresponding Secretary, Dr. R. J. Dunglison.

Alumni Supper.

On Tuesday night, March 28th, the supper of the Alumni Association of the Jefferson Medical College was given at the Hotel Bellevue, at which a large number of professors and alumni were present.

Professor Gross.

Professor Gross has resigned the chair of Surgery in the Jefferson Medical College, of which he has been the incumbent for twenty-six years. His son, Dr. S. W. Gross, has been elected to the chair of Principles of Surgery and Clinical Surgery, and Dr. John H. Brinton to the chair of Practice of Surgery and Clinical Surgery.

Physicians.

The following is the table of graduates of the medical colleges this year, as compared with those of last year:—

	1882	1881
Philadelphia Dental	52	64
Pennsylvania Dental	51	58
Hahnemann	57	83
College of Pharmacy	117	140
Women's	19	19
Chirurgical	3	..
Jefferson	247	205
University of Pennsylvania:—		
Medical	122	115
Dental	41	47
Totals	709	731

Essays upon The Radical Cure of Cancer, Offered for Prizes.

The undersigned, who, in October last, was delegated to receive competing essays on the subject of the radical cure of malignant disease, announces that three essays were presented. In the consideration of their merits the assistance of Dr. George B. Shattuck, editor of the *Boston Medical and Surgical Journal*, was invoked; and it has been decided that no essay is worthy of a prize.

The same subject, namely, "The Probability of the Discovery of a Cure of Malignant Disease, and the Line of Study or Experimentation likely to bring such a Cure to Light," is proposed for essays to be presented in competition, not later than the first day of December, eighteen hundred and eighty-three (1883), to the undersigned, who, with such assistance as he may select, will be the judge of their merits.

For the best essay on the above subject, a prize of one thousand dollars will be given, the right being reserved to withhold the prize in case no essay of sufficient merit be presented.

The sum above mentioned has already been deposited in the New England Trust Company, of Boston, subject to the call of the judges.

The essays must be legibly written in English, and neatly bound. Each one must bear a motto, and be accompanied by a sealed envelope bearing the same motto, and inclosing the name and address of the writer. They will all remain in the possession of the donor of the prize, for convenience of reference, and the privilege is claimed to publish the successful one, with the name of the writer. No writer, however, surrenders the privilege of retaining a copy of his essay, and publishing it.

The decision concerning the merits of the essays will be made chiefly from a practical standpoint, it being the object of the donor of the prize to obtain suggestions by which a search for a cure for cancer may be instituted.

For the donor,

J. Collins Warren, M.D.,
58 Beacon street, Boston, Mass., U. S. A.

QUERIES AND REPLIES.

S., Ky.—We know of only one, which occurred in this city, and it was not positively proven to be due to the anæsthetic.

A. G. C.—Pure vaccine lymph is not a *poison*, in the ordinary acceptation of the term. It is absorbed by the lymphatics. It is not corruption in the true sense of the word.

Subscriber.—Continuance of the treatment you mention ought not, on general principles, to be at all injuricus, but with so powerful a drug, the patient ought to be carefully watched.

MARRIAGES.

HAYNES—FELLOWS.—On March 14th, 1882, by Rev. H. L. Jones, at the residence of the bride's parents, John R. Haynes, M.D., of Philadelphia, and Miss Dora Fellows, of Wilkesbarre, Pennsylvania.

MARKOE—SHELTON.—In New York, on Thursday, March 9th, by the Rev. Charles H. Parkhurst, D.D., Dr. Francis Hartman Markoe and Madeline, daughter of Theodore B. Shelton.

PATTERSON—BELL.—At Glendale O., March 8th, 1882, by Rev. Dr. Potter, at the residence of the bride, Dr. John E. Patterson and Mrs. Sarah E. Bell, all of Glendale.

DEATHS.

CHAMPLIN.—Dr. James T. Champlin, ex-President of the Colby University, died on March 15th, at Portland, Maine, of paralysis, at the age of 70 years and 9 months

McFADDEN.—In this city, on March 12th, Dr. James McFadden, in the forty-ninth year of his age.

MORROGH.—At New Brunswick, New Jersey, Clifford T. Morrogh, M.D., on Monday, March 13th.

REESE.—At Knoxville, Tioga Co., Pennsylvania, on Sunday, December 4th, 1881, of typhoid fever, Alice M., wife of C. A. Reese, M.D., aged 34 years and 8 months.

SMITH.—On March 10th, Dr. George Smith, of Delaware County, aged seventy-eight years.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1311.] PHILADELPHIA, APRIL 15, 1882. [Vol. XLVI.—No. 15.

Original Department.

Lecture.

THE DISORDERS OF PRIMARY DENTITION.

BY. M. BLACHEZ,

Physician to the Hôpital des Enfants Malades.

Gentlemen:—There is no fact more generally recognized in infantile medicine than the influence exercised by dentition on the general health of children. "A fine child, until it commenced to cut its teeth," is not alone a familiar saying; the experience of the greatest physicians have proven its truthfulness. In all the best works on infantile pathology, both ancient and modern, the influence of dentition is regarded as indisputable. But it must be admitted that this doctrine has been, perhaps, carried too far; the best clinical observers have been obliged to protest against the assertions of many who would attribute most of the diseases from which children suffer to the influence of dentition. This protest is evident in the works of Rilliet and Barthez, in the clinical lectures of Trousseau, the treatise by Bouchut, and in Dr. West's remarkably practical book. None of these practitioners desire to exaggerate the rôle of dentition in the etiology of infantile diseases; but its influence in this respect is not contested or denied. It is, in fact, an opinion current in medicine since the days of Hippocrates, and confirmed by Sydenham, Haller, Hunter, and the cotemporary authors we have already cited. However, certain voices have been lifted against this generally received opinion. After showing that dentition has been accused of producing many disorders not referable to it, which is perfectly true, certain authors have denied that teething has any influence in the production of morbid phenomena.

M. Magitot, whose authority on any subject connected with the teeth cannot be denied, has particularly combated the commonly received opinion. In his work on the disorders attending the irruption of the teeth, published in the *Archives de Médecine*, in 1881, he seeks to prove that dentition has no part in the production of the disorders imputed to it, and that these disorders are merely coincidences. He recalls the opinions of Rosen, Andral and Trousseau, that great caution should be used regarding the disorders of dentition, an opinion carried much further in the works of the distinguished English dentist, Dr. Tomes. We will consider, later on, the arguments brought forward by M. Magitot to sustain his opinions. To commence with, it seems to me useful to consider the question under three principal heads:—

1st. Should we admit, in certain cases, the existence of a difficult, laborious dentition, and if so, what are the characteristic signs?

2d. Can this difficult dentition induce disorders proper to this condition, and characterized by their nature, course and duration?

3d. When a child is teething should all the maladies which may present themselves be laid to the influence of this physiological act?

These different questions do not appear to me of difficult solution. Dentition is a physiological act, but not necessarily accomplished, on that account, without pathological reaction.

Children who pass through the period of primary dentition without presenting any symptoms of suffering constitute veritable exceptions.

The incisors and the first molars often pierce the gums without provoking any very marked reaction, but the irruption of the second molars, and particularly of the canine teeth, generally causes much more trouble. The phenomena which accompany the eruption of the teeth have, with reason, been divided into local and general. The most common local phenomenon is salivation, and this is the more remarkable as the buccal mucous membrane in young infants is generally dry, as Dr. West has rightly observed. At the moment when the gums become swollen and the crown of the tooth becomes prominent through the thinned surface of the gum, then the infant constantly drivels, and wets several handkerchiefs in a few hours, which does not happen with a child before the fifth month. This exaggerated secretion of saliva can only be explained by the excitation transmitted to the salivary glands along the mucous membrane of their ducts.

If the irritation is more marked, and the child very impressionable, the hands are carried incessantly to the mouth, and the infant bites at and rubs against the gums any hard object within reach, particularly objects which communicate a sensation of cold. At a more advanced stage of irritation aphthae are developed and thrush may supervene. The gravest manifestations of the irritation produced by dentition constitute what has been called odontitis infantum, characterized by a veritable stomatitis with ulcerations, which may persist so long, and determine so much suffering as to give rise to great anxiety for the life of the child, although West has never observed any case where these disorders actually caused death. In the presence of such symptoms it is difficult to deny the possibility of local disorders induced by dentition. We admit that these grave symptoms are rarely observed, but Trousseau, Guersant, West, Rilliet and Barthez mention them, and their occurrence cannot be placed in doubt. It is not, however, on this point that the principal objections have been formulated; but against the disorders affecting the general system and imputed to dentition. It is, in effect, impossible to deny, with any appearance of reason, the existence and etiology of the local disorders, with which every physician is acquainted; but when we are in presence of disorders such as diarrhœa, skin eruptions, convulsions, fever, etc., which present nothing special, then it is less difficult to deny the influence of dentition, and pretend that the occurrence of these symptoms at this period is a mere coincidence; that these may be observed at any period of infancy, and that they are attributed, without any sufficient proof, to the effect on the general system of the process of teething. Nevertheless, no physician who comes frequently in contact with sick children hesitates in recognizing these evidences of constitutional disturbance as due, or referable to dentition, not in all cases, but in certain conditions of daily observation.

Reflex sympathetic phenomena are manifested in infancy with peculiar energy, of which we have daily proof; agitation, fever, vomiting and convulsions, are often induced by slight, but constant sources of irritation, such as a badly-placed pin or a boil irritated by the contact of dry and hardened dressings. How, then, can it be denied that a continuous pain in a swollen gum, which persists and cannot be relieved, may throw the infant into a condition often exceedingly distressing?

Since the application of a blister or sinapism often determines convulsions in a nervous child, why should the continuous irritation of dentition be incapable of producing the same symptoms?

It is true our opponents seek to establish that this pretended pain of dentition is purely mythical; that there is no reason why the eruption of the tooth should cause pain, since there is neither effraction nor traumatism, but a very gradual wearing away or absorption of the tissues of the gum. It would then be necessary to prove and demonstrate that the different tissues pushed outward and compressed during the evolution of the tooth do not suffer in any way from this compression, which it would appear exceedingly difficult to admit.

When a vigorous child of from six to eight months, nursed by a healthy mother with excellent milk, is suddenly observed to lose sleep and gaiety, become irritable and quit the breast after a few attempts to nurse, while at the same time it drivels incessantly; when, again, after a careful examination of all the functions, no explanation can be found for this change, except that the gum is hot and painful when touched, it must necessarily be admitted that the process of dentition has caused these disorders. A few days pass, the general malaise persists, or is augmented in intensity; diarrhœa may come on without any change in the habitual diet of the child. No active treatment is instituted, and yet, all of a sudden, the morbid symptoms disappear, and examination of the gum shows that the irruption of the tooth is complete. Can the conclusion, then, be other than that we have already formulated?

This is not a case invented for the occasion, but

a fact of daily observation; with some children even the irruption of each tooth or group of teeth is attended by these morbid symptoms.

If these facts are not constantly observed, they are at least common, and it is certainly very rare to find a child who has not suffered more or less during the period of dentition. I have observed, for my part, a child who never had one of his first twenty teeth without suffering from one or several convulsions, and who has never presented any since the period of dentition.

What we have said of the fever, diarrhœa, and nervous disorders, can be repeated with equal justice for the multiform eruptions frequently observed in similar cases. There is nothing special to distinguish these eruptions, any more than the intestinal or nervous disorders, from those produced by other and widely different causes. They demonstrate, however, the existence of disorders in the functions of the various organs, and in the secretions, produced by dentition.

What especially characterizes these eruptions is the period of their appearance and the manner in which they follow "the evolution of the teeth, preceding and accompanying the irruption of a group of teeth and then disappearing.

If all the morbid symptoms observed during dentition cannot be ascribed to this physiological act, it is not the less true that these disorders, appearing only at this period, accompanying the irruption of the teeth and ceasing when this is accomplished, do not leave in doubt their veritable causation.

It may be admitted that dentition is not an isolated phenomenon: that it coincides with a period of peculiar activity in the development of the child, principally with the formation of the bones, the increase of the glandular system of the digestive apparatus, and that at this moment the nervous sensibility is at its highest pitch.

This is all true, but it is certain that dentition, particularly when painful, has a preponderating rôle in the causation of these morbid manifestations.

After denying that teething can be of itself painful, M. Magitot demonstrates that traumatisms practiced on young animals at the period of dentition, and affecting more or less deeply the gum or the tooth, do not determine anything comparable to the disorders attributed in children to the evolution of the teeth.

We are of opinion that there can be no analogy between the sections, punctures and tearing of the alveoli in these experiments, and the normal evolution of the tooth, which separates, forces out and slowly compresses the tissues. This last is a purely vital act, not in any manner reproduced in the traumatisms already mentioned, which induce widely different reactions.

In the same way the numerous diseases of the teeth, caries, ulcerations, etc., may often induce very severe pain without provoking any symptom resembling those observed during the period of the evolution of the teeth. The reactions are peculiar to this period and are analogous to those observed during the evolution of other organs.

The opinions of M. Magitot are reproduced in the able and conscientious thesis presented by M. Levèque to the Paris Faculty.

We have particularly considered the seven observations given by M. Levèque, and we find that several might be given as types of the disorders induced by dentition, and the interpretation of them given by the author is, to say the least, extremely far-fetched. But these objections do not mar the value of the work; it is possible that the author will persist in his ideas if he practices dentistry exclusively. But it would be entirely different if he is called upon to follow, in their maladies and indispositions, young infants, to have them under his care during their development, and be obliged to interpret their sufferings. He would then remark, with all clinical observers, that dentition exercises a very marked influence in the production of infantile disorders, and he would soon recognize how solidly the opinion he combats to-day is established.

Communications.

PUERPERAL ALBUMINURIA.

BY J. L. MILLIKIN, M.D.,
Of Carmichaels, Pa.

Albuminuria (or the disease of which it is a symptom) is probably the rarest as well as the most dangerous of all the diseases of pregnancy, and its almost inevitable termination, eclampsia, carries with it the most terror; excites within the physician the greatest responsibility, and the necessity of prompt and decisive action. The importance of the subject, demanding from every physician the expression of every thought which may add in the least to our knowledge of so grave a condition, is my only reason for presenting the following case:—

On January 5th, 1882, I was called to see Mrs. H., aged 18, primipara, on account of swelling of the limbs and other parts of the body. Upon examination I found œdema of the upper and

lower extremities, and intense œdema of the external genital organs. She was, however, still attending to some household duties, and suffering no inconvenience, except slight headache, an occasional attack of nausea, and a stinging sensation in the swollen parts. Bowels regular, and amount of secretion of urine normal.

Inquiring into the history of the case, I found she had always enjoyed excellent health prior to her pregnancy; never had had any symptoms of renal disease; and that the first time she had noticed the swelling of the limbs was about four weeks previous to my visit, being now in the eighth month of pregnancy, according to the best data she could give. Impressed with the importance of examining the urine, I requested Mr. H. to bring a specimen to my office, for examination, on the day following, when, as I had great reason to suspect, I found it loaded with albumen, by the tests with heat and by nitric acid. I informed Mr. H. of the gravity of the case, enjoined rest, gave directions for the diet, and attention to the condition of her bowels, prescribing iron, as recommended by Cazeaux, and a decoction of uva ursi and buchu leaves, to keep the kidneys acting.

There was nothing remarkable in the case, except a slight diminution in the swelling, until the evening of January 7th, when she had nausea, was restless, and slept but little during the night. Early in the morning of January 8th she complained of pain in the head, and of seeing "balls of fire," etc. About 4 A.M. Mr. H. came for me, in great haste, saying "come quick, Doctor, I'm afraid my wife is dying." I dressed as quickly as possible, jumped on his horse and galloped to his residence, a few steps out of town. Dr. J. A. Gilbert, of this town, was called simultaneously, and arrived a short time after I did. Finding my patient, on my arrival, in violent convulsions, I bled her freely from the arm, and by that means controlled the convulsion, restoring her to partial consciousness for a few minutes, during which time she exclaimed "I'm blind." There was soon, however, a complete suspension of the sensorial and intellectual faculties. A digital examination revealed no signs of approaching labor. Several convulsions succeeded the first one, which could only be controlled by chloroform, during the intervals of which she remained in a half conscious state, but showing no signs of intelligence. About five hours after the first convulsion there were some signs of labor,

Dr. A. Patton, of Jefferson, Pa., was called in consultation, and by the time of his arrival, noon, we were able to introduce the finger into the os uteri, and diagnosed a vertex presentation.

After consultation, it was decided to bring about delivery as soon as possible, as the only means of saving the life of the woman, and as offering the best chance for the life of the child.

Accordingly, I introduced my finger, and finding the os dilatable, ruptured the membranes, and gave ergot. She could swallow but little, and we gave it per rectum. Used the finger frequently, to assist in the dilatation of the os. The pains now came on more violently, during which there was at each time an exaggeration of the convulsive condition, which was controlled by chloroform. A large enema of warm water cleared the rectum of fecal matter, and also acted by sympathy in increasing the contractions of the uterus. At 8 P.M. we decided upon an attempt at an application of the forceps, although the descent of the head of the fœtus into the pelvis was scarcely perceptible, and the os dilated but little. Dr. Patton etherized the patient, and I applied the forceps and delivered the woman of a dead child, which was poorly developed, and evidently had been dead several hours. Had some difficulty in removing the placenta, which was adherent, having to dissect it from the walls of the uterus with my hand. After delivery there was a complete cessation of a tendency to convulsions, though she lay in a stupor. Used stimulating enemata, and she was soon able to swallow a little whisky and aromatic spirits of ammonia.

About this time a messenger came for me to attend a labor case six miles in the country, and there being indications of reaction, I left the case in the hands of Drs. Patton and Gilbert, while I would attend to the call and return.

I returned by 9 A.M. the next day. She was now able to take a little nourishment; the stimulants were continued, and by noon she could distinguish persons, and in a few hours consciousness had fully returned. From this time there was nothing unusual in the case; it progressed favorably under the influence of tonics and diuretics and stimulating regimen. A copious secretion of urine relieved all œdema, and in ten days from the time of delivery there was not a trace of albumen in the urine.

In conclusion, I desire to insist upon the importance of making frequent examinations of the urine of all pregnant females suffering from any disorder whatever, and especially when there is any tendency to œdema, so that an early diagnosis may be made and the proper treatment applied. As the main feature in the pathology of

the disease is an altered state of the blood, consisting chiefly in a diminution of its solid constituents, it is self-evident that the treatment should be reparatory. Unless there should be symptoms of renal congestion or general plethora, bleeding would be contra-indicated in a disease attended with so great impoverishment of the system. A stimulating diet, rest, ferruginous and vegetable tonics, should certainly form the basis of the treatment.

A REMARKABLE BRAIN WOUND.

BY R. R. PURYEAR, M.D.,
Of Wylliesburgh, Va.

In the issue of the MEDICAL AND SURGICAL REPORTER, of the 28th January last, I read with interest the report of a case of "A Penetrating Pistol Wound of the Brain," by Dr. J. Foster Bush. By this I was so forcibly reminded of one that came under my charge in 1879, that I have thought it well to give it publicity.

On the night of the 16th of January, 1879, I was called hurriedly to see J. Mc., an Irishman, aged 40 years. On arrival received the followiug history: The hour of retiring having arrived, Mr. L. (his room-mate) walked out to attend a call of nature; the night being cold and rainy, he lost no time in its dispatch, returning to the room with his pants in no particular condition, a pistol in his hip pocket. Seated himself hastily in a wood-bottom chair, while Mc. was stooping over in front of him, untying his shoes. The moment L. seated himself the pistol was discharged, and Mc. fell from his seat to the floor. The alarm created by the report of the pistol caused all in the house to rush to the room; finding Mc. as above stated, promptly put him to bed, where I found him. On examination found him unconscious, the general surface of the body and extremities cold, particularly the right side. On examining the head I found the ball had penetrated the cranium directly through the left parietal bone, equidistant from the coronal and sagittal suttures (say one inch) from which opening was oozing brain tissue mixed with blood; on the pillow was visible at least three ounces of brain tissue that had previously escaped. Hoping to find the ball near the surface, I used my little finger as a probe, which I cautiously introduced to its second joint; not touching the ball, I next resorted to the female catheter, using it likewise as a probe, which of its own weight descended three inches, no ball touched; I removed it and applied cloths wrung out of cold water to the wound and stimulating applications to the extremities. Pulse feeble all the time, ranging from 50 to 60 per minute during the night, associated with stertorous breathing.

On the following day the breathing was heavy; no change in the pulse; brain tissue still escaping; surface cold, particularly the right side. Liquids put into his mouth could be swallowed with great difficulty, always attended with a spasmodic cough. With the catheter his bladder was evacuated every six hours; no return of consciousness. On the third day, under the influence of stimulating enemas, his bowels were partially evacuated. Continued the use of the catheter, frictions and stimulating applications to the extremities; cold cloths saturated with carbolic water applied to wound. The brain tissue now ceased to come away. Liquid food continued; deglutition much improved. On the fourth day found his left side, leg and foot warm. The right side, leg and foot still cold; a sanious discharge from the wound; pulse 75; a partial return of sensation; would occasionally move his left arm and leg; right leg and foot responding to no impression made on them. Could now swallow with sufficient ease to enable me to administer an aperient. He now passes his water in bed. Showed signs of hunger. Cold cloths saturated with the carbolic acid water continued. On the fifth day pulse 80; could move his left arm and leg sufficiently to enable him to change his position in bed; right side perfectly paralyzed; could not speak, but with signs could show his approval or disapproval of services performed by attendants; had a copious action from his bowels; passed his water to-day in vessel, which was handed him in response to signs he gave.

From this date he steadily improved, to the eighteenth day, with no further attention bestowed than to keep his bowels, kidneys and skin up to their duty. On this day I was called to see him; on arrival learned that he had been suffering for the past eighteen hours with a throbbing headache and general fever, and a few hours previous had a couple of "fits." Finding the secretions generally well kept up, I next looked to the wound, which had entirely healed and puffed up above the surface of the scalp; to the touch fluctuation was apparent; on simply cutting through the skin the pent-up matter made its exit, and with it the headache and "fits. On the following day found his articulation so much improved that he could make himself understood by all bystanders, and could use his right arm and leg well enough to enable him to go about

the room when he wished. Two months from this date he was in active employment, having nothing to complain of save a dull aching in the right shoulder whenever he walked any distance, or used the axe or hoe "right-handed" (by this he meant right hand foremost on the helve). These latter troubles continue to this day.

But, not to anticipate: In the latter part of the year 1879 he left this location and went to Claremont, the location of a second colony in Surry county, this State; there he contracted chills and fever, which continued on him to a greater or less extent till he returned to Barnesville, in October, 1881, a perfect wreck in appearance and health; he then came under my treatment again; after relieving the chills and restoring the secretions I thought him well, but to my surprise, at an early day I was called on to treat him for "fits," as they were called. On my arrival my attention was at once directed to this old wound (no hair on his head to obstruct view), the skin over which was much elevated and fluctuation unmistakable; on reopening this wound, the matter again escaping, relieved him at once. On interrogation, he informed me that he had had two similar attacks during his stay at Claremont, and in neither case was he relieved till the old wound reopened itself by suppuration.

In the history of this case a few interesting points present themselves for solution:—

1st. Where did this ball make its first lodgment?

2d. Paralysis (the effect) having ceased, must not the ball have changed its location? Or, have these decussating nerves the ability to harmonize the presence of this foreign body with the performance of their natural functions?

3d. By books we are told that leaden missiles soon become encysted, and as a result, cease to irritate; then why these frequent suppurations for the past three years?

4th. If not the ball, must there not be some foreign body or substance, an irritant present in the brain, that the vis medicatrix naturæ is attempting to throw off by suppuration? If a foreign body or substance, can it be spiculæ of bone?

5. Why these abnormal pains in the right shoulder and arm after the special use or labor mentioned?

—Dr. Charles M. Seltzer, 1530 Fairmount Av., has been elected Treasurer of the Alumni Society, Univ. of Pa. *vice* Dr. T. H. Cathcart, deceased.

SPLINT FOR FRACTURE OF ELBOW.

BY N. S. READ, M.D.,
Of Chandlerville, Ill.

In the treatment of injuries of the elbow-joint, in order to give the patient the best possible chance for a perfect recovery, it is necessary, in many cases, to keep up passive motion, and in some cases to make light pressure on the condyles of the humerus. I have contrived a very simple appliance, which I exhibited at the last session of the Illinois State Medical Association.

It consists of two pieces of tin, represented in Figure 1. The splint, when completed, is shown in Figure 2.

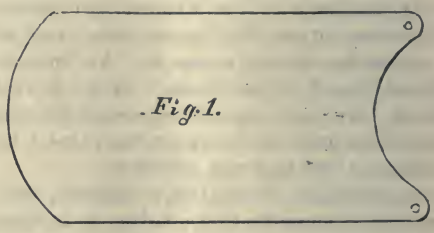


Fig. 1.

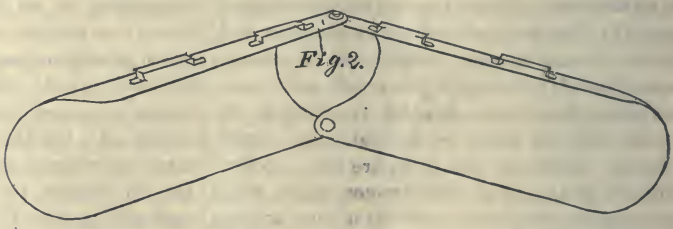


Fig. 2.

It answers every indication of either Welch's or Bond's Splint, and, in some respects, I think it superior.

The tins should be cut in length to correspond with the length of the arm and forearm respectively, and the width equal to about two-thirds the circumference of the arm. There should be four staples made of tin, folded on itself, in order that the edges may be smooth, and soldered near the edges of the strips of tin, through which tape can be passed, to confine the splint to the arm. Two copper rivets and washers, such as can be found at any hardware store, and the materials for the splint are complete. The two pieces are next curved to fit the arm, and the rivets passed through the holes, from within outward, and riveted over the washers, forming a good strong joint.

The advantages of this splint over any other that I know of, are, First, its cheapness and the ease with which it can be constructed. Second. The tin can be formed to fit the inequalities of the arm. Third. As much or as little pressure

can be applied to the condyles as desired. Fourth. The arm can be dressed at any angle required, and if desired fixed there by attaching a wire to one of the staples of the arm and forearm of the splint. Fifth. Any amount of passive motion desired can be kept up by the patient without danger of displacing the fracture, which is of the greatest importance in treating injuries of the joint.

VENESECTION IN PNEUMONIA.

BY E. O. BARDWELL, M.D.,
Of Emporium, Pa.

Although much has been said on this subject recently, it occurs to me that there is still opportunity for more. In speaking of blood letting it should be remembered that venesection was brought into desuetude by its indiscriminate and irrational use; and much as it is to be deplored, it is nevertheless true that mankind in general show a remarkable tendency to rush blindly from one extreme to another. Writers supporting a particular line of treatment are prone to become excited, and to come very close to calling their opponents fools. This is not argument, and is not at all conducive to an impartial consideration of their statements. Put forth with so much spirit the wind of oratory sweeps away the truth that is in it. There are physicians who would not bleed under any circumstances; there are others who would not apparently like to see venesection practiced as it was forty years ago. It is my opinion that the greatest good to the greatest number will be favored by a healthy conservatism.

It is impossible that a plan of treatment followed to the extent that phlebotomy has been should not contain something beneficial; it is just as certainly impossible that it could have been so completely dropped unless it also contained seeds of error; as the subject of venesection is being revived, let us study the indications for its practice, rationally, dispassionately, and without prejudice, if that is possible. Pneumonia, at present the disease illustrative of the curative and ameliorating powers of venesection, requires other agents besides bleeding, for its proper treatment. Seen in the outset, tr. aconite rad., given in one-half drop doses every fifteen minutes for two hours, followed by one drop doses every two hours for twenty-four hours, will often abort an attack of pneumonia; it is not always necessary to wait so long before using other measures; if no amelioration is apparent in six hours the abstraction of blood, either local or general, is indicated, and will be all the more beneficial in its results from the prior administration of the arterial sedative and diaphoretic.

After twenty-four hours, as a rule, the indications for the use of aconite are past, and carbonate of ammonia, combined with either quinia in small doses, or with morphia, or with both, as may be indicated, will be followed by good results.

The exhibition of the above therapeutic agents will not be contraindicated by prior venesection, and their value may be much enhanced in the later stages by the application of cups, wet or dry, according to circumstances. Treatment will not be satisfactory if forcing nourishment into the patient is practiced during the early stages, nor will it prove so if proper pabulum withheld during the later stages.

Moderation and independence, if conjoined with common sense, will work better in the majority of cases, than following blindly the dictates of any leader.

HOSPITAL REPORTS.

COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CLINIC OF ABRAHAM JACOBI, M.D.

Nævus.

GENTLEMEN:—This little baby, seven weeks old, has, as you see, an elevation of the cutaneous surface at the outer angle of the right eye; it is about the size of your little finger nail, red in appearance, and has a feeling as if extending down into the subcutaneous tissue. It has been present ever since the birth of the child, and of late has increased in size more rapidly than at first. There is danger, therefore, that if it be left alone it may extend to the eyelids and conjunctiva. The name of the tumor is nævus. We will remove it with the actual cautery, not heated to a white heat. You observe there is some bleeding from the superficial vessels, but that will cease of itself. It is better to perform a second operation than to carry the first one too far, and should it prove that we have not removed it entirely the mother will bring the child back again within two weeks and the cautery will be applied again.

Peri-bronchitis.

On examining this boy, aged about eight years, you will observe that his chest is constricted above, flattened both before and behind; that below there is a drawing in, as it were; and that it is flattened on both sides. The veins of the chest are rather conspicuous. Without asking any questions with regard to the boy's history, we would infer, from these facts, that there is some obstruction to the circulation, and we would expect to find it either in the lungs or in the heart. On examining the heart we can hear no murmur, and there is, therefore, probably no mitral lesion which would account for this congestion of the

veins. We may suppose, then, that the trouble with the circulation lies in the lungs.

The full, expanded form of the chest which characterizes it in health is almost entirely changed, being flattened from before behind, and from side to side; therefore, whether the process in the lungs has preceded or followed this change in the configuration of the chest, it must, at any rate, be of old standing; if there be pulmonary disease it must be an old one. A recent pleurisy or pneumonia would not give rise to such deformity of the chest and dilatation of the blood vessels. The two conditions of the lungs which may give rise to such an appearance are chronic bronchitis, with or without emphysema, and phthisis. Cases of phthisis do occur in children as young as this boy, but as a rule in this disease, whether in the child or adult, the deformity is mostly on one side, whereas here it is about symmetrical. If the case be one of bronchitis, you may call it, as you please, a case of chronic pneumonia or a chronic bronchitis; the meaning is that there is a hyperplastic inflammation of the interstitial tissue around the bronchi, rather than inflammation of the mucous membrane of the bronchi. If one speaks of a bronchitis he means inflammation of the mucous membrane of the bronchi; if he speaks of a peri-bronchitis he means inflammation of the interstitial tissue between the smaller and around the larger bronchi, with thickening of the bronchi, having the effect of compressing, narrowing their size, but now and then, however, producing dilatation If you will imagine that around a larger bronchus there is a good deal of exudation, of hyperplastic tissue proliferation; that after a while induration takes place in this; the tissue, instead of remaining heavy, thick and voluminous, contracts, or, as it were, cicatrizes, as in the case of a scar; you will see that the wall of the bronchus is pulled upon on every side outwardly, and what has been called bronchiectasis is produced. Not infrequently the diagnosis of phthisis has been made in cases which were simply illustrations of dilatation of bronchus in consequence of peri-bronchitis.

On the right side, here, I find an unusual amount of so-called puerile respiration, a harsher, coarser respiration than we find in the normal lung of an adult. The expiration on the right side is more prolonged than inspiration, as compared with the left side, and it is evident that more peri-bronchitis has been going on in former times on the right side than on the left.

If there were emphysema in this case, the thoracic walls would probably bulge out more than they do. There would be a large thoracic cavity with comparatively little respiration going on, and instead of finding a certain degree of dullness, there would be a sonorous, respiratory percussion sound, which would extend over the heart region, reducing its area of dullness to a considerable extent. Such, however, is not the case here. The area of dullness over the heart is, on the contrary, enlarged.

To what cause shall we attribute the enlargement of the heart in this case, since there is no murmur? The enlargement is particularly toward the right. "To an over-worked heart." Yes; the heart has been compelled to labor against an obstruction in the lung, of years' standing, the obstruction being due to peri-bronchitis many times repeated, and resulting in chronic induration.

He has a temperature at present of 102° F., which would indicate that there is a process, either of a general or local character, going on, and producing fever. There is a mucous râle heard over the left side, and it is probable that he has a recent catarrh, which will probably pass by, though he is more imperiled by such processes than most children of his age. By having him go to bed now, and giving him some quinine, I think another bronchitis and peri-bronchitis may be warded off.

What would be the general indications for treatment? "The best possible nutrition." Yes, that is true, but there has been a process going on in the lungs which calls for attention. If it can be fulfilled, the indications in my mind would be, to reduce the amount of exudation in the lungs: to do away with those parts which are still being dissolved; and there is one remedy which in a number of cases does a great deal of good, viz., iodide of potassium. This drug will have the effect of dissolving, absorbing, aiding in eliminating material that is not absolutely permanent. When the exudative material has become absolutely firm, undergone a change into connective tissue, the inference must be that in the majority of cases the iodide of potassium can be of no use. But there are exceptions to this rule. Such exceptions are, for instance, in the formation of connective tissue of a syphilitic origin; we know these are exceptions; and it appears there are some other exceptions also, for we know, both experimentally and empirically, that a great many cases of asthma dependent upon emphysema and peri-bronchitis are very much improved by the internal use of the iodide of potassium. It appears to me that there is no other explanation for this fact than that the iodide does absorb, does dissolve, this material. I should, therefore, judge that it was unnecessary to wait until this boy develops more emphysema and has attacks of asthma before giving him the drug, but begin its use at once.

On the other hand, and this is a matter of some practical importance, we shall have to watch, and see that the iodide of potassium does not disarrange his stomach. We ought also not to lose sight of the fact that the iodide of potassium is able to dissolve and to absorb that which we do not want it to dissolve and absorb; but it is true, again, that when a given remedy is clearly indicated to produce a local result its action will be directed to that object, whereas under other circumstances it might affect other parts. Or, this boy might be given, if you prefer, the iodide of sodium. I should not hesitate, however, to give him four or five grains of the iodide of potassium, three times a day, in plenty of water, some little time after his meals, not beginning its use until his fever has ceased. At present, I would put him to bed three or four days; give him a dose of eight grains of quinine about eleven o'clock every day, and a dose of opium, say five grains of Dover's powder, every night, if he coughs much, and keep him on warm drinks, and let him perspire a little.

Now, these are cases which we meet with in ordinary practice, and it is important to understand them, and treat them aright, for if this boy does not get well now. he never will; he will be an invalid all his lifetime if he is allowed to grow up in this condition. You can readily see of what vast importance an early diagnosis is in such cases, in the very commonest family practice.

CLINIC BY PROF. ALONZO CLARK, M.D.

Bright's Disease.

This patient, a man about thirty-five years of age, complains of a cough which has lasted six months, and of a smothering sensation of six weeks' duration. In reply to my questions he states that he gets out of breath on going up stairs, that he never had rheumatism, that since about two months he has had swelling of the stomach and legs, also some swelling of the face; and he has not felt well generally. His business is doing general work about a sugar refinery, lifting machinery, etc. There is, therefore, nothing about his employment which would suggest the possibility of anything acting upon him chemically to produce ill health. He says his urine is the same as usual in amount and color.

His referring the sense of oppression to the cardiac region suggests the propriety of examining for heart disease. His urine has just been examined for albumen, by boiling, and is found to contain it in moderate amount. Adding a drop of nitric acid to this, it does not clear up, which shows that the deposit is not of phosphates. Alkaline urine should be rendered acid before a thorough test for albumen can be made by boiling; the color, which is light, evidently indicates low specific gravity.

Examination shows no abnormal prominence over the region of the heart; the beats are very much like those of the town clock—regular; no murmur can be heard; the heart is not enlarged; there seems to be nothing about the heart, therefore, to account for his sense of suffocation, which is present under certain circumstances. Possibly there is an effusion into the pleural cavity, which may account for the oppression of breathing. On inspection you will observe that on the right side, behind, there seems to be some bulging of the chest walls. The voice-sound is more distinct down to about two fingers' widths below the angle of the scapula on that side, than it is below that point, and percussion dullness begins at about the same place. It is very likely the breathing sounds will be heard less distinctly below that point, perhaps not audible at all. I find it not to be so, however; it can be heard all the way down, and it is probably due to the sound being conducted by the walls of the chest. We find about the same signs on the left side. Percussion resonance is changed with change of position of the patient. There is evidence of more fluid on the left side than on the right. Here, then, we have an explanation of the sense of oppression which he experiences on going up-stairs.

When there is albumen in the urine, and the urea circulates in the blood more than it should, it is not an uncommon thing to have a pleuritic effusion; and when it occurs from this cause it is almost always double. It is much more apt to occur where there is regurgitation at the mitral valve. In this instance the heart seems to be sound, and this case shows, therefore, that passive pleuritic effusion may occur where there is no regurgitation of blood. The reason why it is much more apt to occur when there is a valvular murmur present, is, that the blood is set back upon the lung and congests the vessels belonging to that system, and thus induces an effusion of the fluid there.

The case, then, is pretty well before you; it appears to be one of simple Bright's disease, and not very far advanced. There is not much swelling of his legs now; there has been more. By proper treatment he will probably be able to get rid of his effusions in large measure, or completely, and then he will be much more comfortable.

It is important for him to be in an atmosphere of even temperature, and not expose himself to the cold; and, being a poor man, it is probable he cannot have these advantages at his home, and a residence in the hospital, where the temperature is kept uniform, would do him good. The effect of exposure to cold in these cases, even when the person is not conscious of being cold, was illustrated in a case I have under care now. A gentleman who had had this double pleuritic effusion, and this swelling of the legs, had become almost entirely relieved of it, and, without my permission or knowledge, he took a drive one pleasant wintry day; but it was too cold. The next day fluid reappeared in the chest, to a point higher than in this case, and all in the period of one day. Another instance can be cited, illustrating the same thing. Some years ago a ward in which the servants slept, at the hospital, was used for minor purposes, and at this time I had charge of it, there being five or six cases of Bright's disease in the ward. One November afternoon a carpenter, after I had been there, opened a large hole in the floor, and the cellar doors were opened. It happened to be rather a cold night for November, and all of these poor people, those who had Bright's disease, as well as the rest, were exposed to the chilling of the night. The house physician did not know it, and had no opportunity of giving them additional clothes. The result was that every one of them was worse, and one or two of them were so much worse that they died in a few days.

I would advise this man, therefore, the first thing, to confine himself to the house, and if he cannot live without earning something, go to a hospital of his own selection, for there are enough of them in New York, and be treated there. Besides confining himself in a house of an even temperature, he should take diuretics; the acetate of potash, perhaps, will suit him better than others. It is less expensive than the effervescing mixture, the lemon juice and potash, which I have before spoken about, and is about as good as a diuretic. I prefer the lemon juice and potash, because it almost always agrees with the stomach, and that is not true of the acetate of potash; the latter is often vomited. The acetate of potash, taken in about twenty-grain doses every two hours, and a dessertspoonful of the infusion of digitalis three times a day, will very likely increase the action of his kidneys, and relieve him of this effusion. As to the kidney

trouble, which seems to be rather recent, dry cups in the early stage, over the loins, should be applied; and the india-rubber top cups are best, because they can be applied frequently. They do not draw so firmly as to make the parts sore, and they are also better in another respect, that any member of the family can put them on. They may be applied three, four, or five times a day, and thus may be of great advantage.

Renal Calculus.

This young man says he suffers from stones in the kidney, and describes his symptoms as pain in the left side and back, and top of the hip, passing from the back, over the hip, toward the front, on the left side. He first felt the pain a year ago last summer, and it returned last spring. It is of a sharp, jumping character, like the toothache. He cannot lie still when it comes on, but tosses about. That is an important point. I have in my mind now a lady who is suffering from this trouble, and the almost diagnostic fact was that she would lie with her head at one end of the bed this minute, the next minute it would be at the foot of the bed, then she would be out on the floor, then on the sofa, tossing about the whole time. Neuralgic pain does not impel a person to that kind of restlessness.

He says the pain comes on sometimes every other day, sometimes every three or four days, but he says it does not increase the pain to walk. This is a point of considerable importance in the diagnosis of imprisoned calculus. Walking brings into action the psoas muscles, the belly of the psoas pushes against the ureter and excites pain. I have known several cases of imprisoned calculus in which this was a very valuable aid in the diagnosis. The patient, after walking twenty rods or more, has a pain which induces him to stop, and after a little he can walk on again. After getting home and lying down, the pain disappears in about twenty minutes. I am not sure that a calculus in the pelvis of the kidney would be acted upon in exactly the same way, but if it is imprisoned in the ureter that symptom is a great help in the diagnosis.

This patient says his urine has been examined by a physician, who did not say that he found anything wrong with it. He has never seen any blood in it. In some cases of imprisoned calculus the urine is bloody at times. He says the pain is sometimes very severe in the left testicle. He has not noticed that that testicle is drawn up into the body. When present, retraction of the testicle is also another very useful guide in the diagnosis. His urine continues to flow in a full stream until the bladder is empty; has no pain in the penis, except a little at the head, sometimes, after urination. He vomits, principally in the morning, and a great deal when he has pain; and it seems to relieve the pain at times. One of the Chancellors of New York used to say that, if the books were to be relied on, he had been pregnant for seven years; he had morning vomiting for that period of time.

We now get a point which seemed not to be present in this case, according to the patient's statement a moment ago, namely, that jarring in a wagon seems to bring on this pain; it then continues, perhaps two hours, when quiet relieves it, and it is brought on again by moving about. But it sometimes comes on when he is lying still.

It would be a further aid in the diagnosis if his urine were examined to determine what may be the character of the sediment, or turbid state, of which he speaks; whether it contains uric acid, or whatever it may be. The diathesis is an aid to the diagnosis, and that is best illustrated by a microscopical examination of the urine.

I think it is safe to say that he has a calculus, either at the opening of the left ureter, or in the pelvis of the kidney near the opening of the ureter, and that that causes his pain.

Next, how can we relieve him? I do not know of anything for him to take but faith in the future. A physician, at one time a resident of New York, but at the time he came to me he lived a hundred miles away, presented symptoms very much like those that we find in this patient, and I made the above diagnosis, and told him that the only chance for him was that the offender would come down in the end, and pass off from the body. He waited for one year, and then another, coming to me once in a while to relate symptoms. Still another year passed by, and he went pretty well into the fourth, when he had an attack of pain that was more severe than any he had before, and he had then a consciousness of relief at the point where the suffering had been greatest. He then waited for the further discharge of it, and was in a country privy, under which was a pit, when he felt the enemy approaching; he was conscious of its entering the urethra, and he put his hand down to catch it as the water was flowing, but he was not quite quick enough. He heard it thump against the upright of the seat, and fall away into the pit, and it was lost to him, but ever after that he was relieved of pain. I have known one or two other instances of that kind.

There is nothing that will dissolve the stone in its position, and it is out of the reach of surgery, unless in these daring days of surgical operations somebody were to conceive the idea of cutting in from behind, entering the ureter and taking the stone out. Such a thing would not be bolder than a great many things that have been done.

There is another mode in which this irritant sometimes behaves. A physician in this city, about thirty years ago, had pains of this sort, that tormented him for two or three years, and he, at length, was laid up by a steady pain in his back; he was conscious that something new was there, and he sent for Dr. Wood (his case being a surgical one); Dr. Wood cut into the muscles of the back, a distance of about an inch and a half, and let out a large quantity of pus, and with the pus came a calculus. It was as large as the end of my thumb, and, of course, it was impossible that it should have passed by the ureter unless that were greatly enlarged. After the discharge of this pus, and the disappearance of the illness that was consequent on the formation of an abscess, he was up and about, and attended to his business, visiting his patients. A year or two after that the same accident occurred again, and to make a long story a short one, he presented to me the seventh calculus that was removed in that way by an abscess, generally opened by the surgeon, in the back. The space

all about there, doubtless, had become adherent by the inflammatory action, so that there was no danger of the pus getting into the peritoneal cavity. He did not die of this trouble. He lived twenty years, probably more, after the first calculus was removed in this manner, and finally died of consumption, possibly induced by the weakening influence of these repeated abscesses; but that is the only way in which he could have been said to have died of the calculus.

The appearance of the back in this case is normal. He complains of a cough; but fresh air will do that most good. The question of prescription I think is answered in general by the indications of his countenance. Observe, he is rather thin, and has not quite a healthy look. I should say he needs tonics; and probably vegetable tonics would be of more service than the mineral. He might take some chalybeate, and the easiest of all of the iron medicines to take is that which I have spoken of before, the chocolate lozenges, containing two and a half grains of the proto-carbonate of iron each. Another point is yet to be decided by a further examination of his urine. We do not yet know whether it is disposed to alkalinity or not. If it is, then the sodas and alkalies would hardly be suitable. If it is decidely acid, then the bicarbonate of soda would be of service, and a person in his condition should take it by test. The urine should be tested in the evening, with litmus paper, and it should never be allowed to come to full alkalinity. The urine will not deposit any phosphatic matter upon a calculus if there be a slight appearance of redness on the litmus paper which is used in testing it. I say not to test it in the morning, because a healthy man's urine is sometimes alkaline in the morning. He should never take enough of the alkali to leave the urine in an alkaline condition at night. As I said before, the great medicine for him is hope in the future.

Bronchitis.

This young man complains of a cough, of four or five months' duration. He has had it during the winter, as far back as he can remember, but heretofore it lasted only a short time. Before making an examination of the chest, we should infer, from his appearance and his statement, that it is altogether likely his cough is due to a common catarrh. But I knew a gentleman who would have the symptoms of consumption coming on as winter occurred, beginning usually in December. He would cough, and raise a good deal; would raise blood in coughing, would have night sweats, and grew thin. That would continue until June or the latter part of May, and then the cough would cease, and after a few days he would get strong enough to get into his buggy and ride out to see his patients, and this occurred marvelously, thirty-five years in succession. He had consumption every winter and got over it in the summer. I have not heard anything of him for nearly thirty years. A friend from his city came to consult me lately, and promised to get the man's further history and send it to me, but he has not yet done so.

The sweating which this patient says he has had on single nights at times is probably due to an extra amount of clothing. I find, on physical examination, only signs of bronchitis. The best prescription for him would be three ounces of the syrup of senega and half an ounce of paregoric, a teaspoonful every four hours. Also friction of the chest in the morning.

Editorial Department.

Periscope.

Locked Twins.

Dr. J. Arondel Barton reports the following instructive case in the *Lancet*:—

On the morning of the 18th of August I was sent for to attend Mrs. C., who was reported to be then "strong" in labor. On my arrival I found the patient to be a robust young woman, very short in stature, and eighteen years of age, and in her first labor. The nurse informed me that she had been in labor for over twelve hours, and that she had not expected to be confined until the end of October. On examination I found the vagina well dilated, the membranes ruptured, and the breech of a fœtus presenting well down in the pelvic cavity. The pains being very irregular and feeble I administered a subcutaneous injection of ergotine, shortly after which the pains became regular and strong, and the breech and body of the fœtus up to the level of the umbilicus were expelled. No further progress being made, I, after a short delay, passed my forefinger up over the thorax of the fœtus to the neck, in the cavity of which I found a round mass, which I at once recognized as the head of a second fœtus, the chin of which was firmly locked with that of the presenting fœtus. I endeavored by all the means that occurred to me to dislodge the two heads, but all my efforts were fruitless. At first sight it appeared to me that there was no way out of the difficulty except decapitation of the first or perforation of the head of the second fœtus; but, on further consideration of the fact that the age of the fœtuses was at most six and a half months, and that, consequently, they were of small size and easily compressible, and further, that the pubic arch was very wide and the vagina well dilated, I determined to attempt to pass up the blades of the long forceps over the surface of the first fœtus, and to fix them on the head of the second, and try to deliver it before the other. This I proceeded to do, first administering chloroform. After considerable difficulty I succeeded in passing both blades up over the body of the presenting fœtus, and getting them locked on the head of the second, and then in a short time I had the satisfaction of delivering first the head, followed shortly after by the body of what was

the second fœtus; the child was alive, and appeared to be somewhat over six months old. In a few minutes the other fœtus was also expelled, followed in due course by the placentæ. There was no rupture of the perineum, nor more than the usual quantity of hemorrhage. The mother recovered without bad symptoms. The children, of course, died within a few hours.

The case is chiefly interesting from the fact of labor coming on at a sufficiently early date to allow of delivery without decapitation or perforation, as, of course, had the case gone on for a very short period longer such operative procedure as I employed would have been quite out of the question.

Bilharzia Hæmatobia.

At a recent meeting of the Pathological Society of London (*Lancet*), Dr. Zancarol showed specimens of bilharzia hæmatobia, from patients dying in Alexandria. One patient was an Arab, who died with dysenteric symptoms. Vegetations were found in the large intestine, which showed bilharzia ova between the glandular and muscular coats. Another specimen was a section of hypertrophied bladder, with vegetations. The mucous membrane was thickened, and in its deeper parts was crowded with ova of bilharzia. The male adult worm of bilharzia was also shown. It was removed from the portal vein of a patient. It was about an inch long. The female is shorter and more slender. Dr. Zancarol stated that the parasites are only found in the portal, mesenteric, hæmorrhoidal and vesical veins. The ova in the urinary tract have a lateral spine; those in the intestine have a terminal spine. He suggested that the parasite, and particularly the ova in the urine, had some influence in the production of vesical calculi. Dr. Zancarol also showed a number of stones from patients in whose urine or bladders bilharzia hæmatobia had been found. Dr. N. Moore stated, that in a patient who acquired bilharzia three years ago, there have recently been found filariæ in the blood during the night. He asked if this had been observed before. These parasites, no doubt, enter the body by the mouth; but he had heard that, in Africa, the natives believe they enter by the urethra, and therefore tie its orifice when swimming. Mr. Bryant asked if there were any special symptoms of the condition of bladder caused by the parasite. Dr. Zancarol had never seen filariæ in natives with bilharzia; but once a friend of his found something very like filaria. The bilharzia exists in Arabs who drink the undistilled water of the Nile, and Europeans are only attacked when they have been found to drink the same water. The chief symptom of this form of cystitis is hæmaturia, and the diagnosis is made by the microscope. The best way to find the ovum in the urine is to try to get out some yellow and dirty specks, and in them the ova is sure to be found. The embryos cannot live more than twenty-four hours in the urine; they are like pumpkin skins, surrounded by ciliæ, and possessing active movements. Many patients infested with bilharzia live for years, even without serious suffering, only occasional cystitis and hæmaturia. The disease requires no special treatment; once in the body, it is impossible to destroy the parasite; but good hygienic treatment will secure immunity from suffering for years.

Irritating Subcutaneous Injections of Nitrate of Silver.

According to Paris *Médical*, these injections, recommended by Dr. Luton, have given excellent results in three cases treated by Dr. Arturo Mazzoti. The first case was that of a woman, 40 years old, suffering a long time from a very violent pain in the left sub-scapular region. All other remedies having failed, irritating injections were decided upon, and with the aid of a Pravaz syringe, 15 drops of a 30 per cent. solution of nitrate of silver were introduced under the skin.

Immediately after the patient experienced a sensation of great warmth, followed, two hours later, by a violent pain which extended to the extremities of the fingers. Fever then set in, and lasted two days, and a circumscribed abscess formed, which, on dilatation, gave issue to laudable phlegmonous pus. At the end of two weeks the wound was closed and all pains had ceased.

The next case was that of a man who had an indolent lipoma, nearly the size of an orange, about the middle of the back. A 10 per cent. solution of nitrate of silver was used, and of this 20 drops were injected in the centre of the tumor; an abscess formed, which after a week opened spontaneously, discharging a considerable quantity of pus. The tumor was reduced to nearly one-half; two more injections, of 10 drops each, were then made, before the first abscess closed, and by the time this was healed the lipoma had entirely disappeared.

The third observation was in the case of a woman, 29 years old, multiparous, who had on the right breast a hard, elastic tumor, occupying the periphery of the gland, and about the size of a walnut. After careful examination, the case was pronounced one of mammary fibroma. The patient having refused ablation, 15 drops of pure tincture of iodine were injected in the centre of the tumor; this caused a violent pain, which lasted about an hour, but no inflammation nor œdema. During a month dissolving ointments were applied, and the tumor decreased nearly one-half; another injection was now given, followed by a slight inflammatory reaction, and the almost total reduction of the tumor.

Congenital Abnormality in Production of Hair.

At the International Medical Congress last summer (*Archives of Dermatology*), Dr. Thin, of London, described a case of congenital abnormality in the production of hair on the scalp, in a girl, aged four, whose hair, although normal in quantity, was defective in its formation, and was reported to have been so since infancy. The hairs were rough and crisp to the touch, varied in length from a fraction of an inch to little over an inch, and broke off in numbers when the scalp was firmly rubbed. There was continual formation and continual breaking of the hairs. When the hand was passed over the head of the child, the sensation experienced was like that felt on

rubbing a pig's skin against the direction of the hairs.

Professor Kaposi (Vienna) had seen two cases of the same kind. In one, a boy four years old, there were present features of lichen pilaris, especially on the neck. The affection was congenital, like ichthyosis. The second case was exactly similar. There was a gradual improvement in the first case, under stimulating local treatment.

M. Vidal (Paris) had also seen similar cases, but twice only. The sebaceous system was poorly developed in them, and the affection was probably due to defective development of the sebaceous glands. Breaking of the hairs was also found in seborrhœa sicca.

Dr. Unna (Hamburg) had under his care a case of the same affection in a young lady. It was in this instance limited to the vertex, having come on after great mental depression. As in alopecia, there was dryness of the skin and coarseness of the hair, with hardness of the scalp. He thought it like scleroderma circumscripta. It got better under sulphur ointment.

Dr. R. Liveing had seen one similar case, which had existed from earliest infancy.

Dr. Bulkley (New York) had seen one case, in a boy aged six, in whom there was also marked lichen pilaris on the arms.

The President remarked on the various alterations of the hair, and referred to its occasional wiry condition.

Night Sweats in Phthisis.

In the Glasgow *Medical Journal* for March Dr. John M. Young says: The drug agaricus, whose influence in checking night sweating was lately brought into notice in this country by Dr. Wolfenden, of Charing Cross Hospital, has been used pretty extensively during the past few weeks in Dr. Gairdner's wards in the Western Infirmary, with extremely satisfactory results. The drug, derived from the common toadstool, is a light brown, bulky, insoluble powder, with a very nauseous taste, and on this account cannot very well be administered as such. A tincture of the strength of ten grains to the drachm was found quite satisfactory, a proportionately smaller quantity of the drug in this form being required to produce equal effects. Finally, a principle, which may perhaps be called *agaricine*, crystallizing in long needles, like those of strychnine and other alkaloids, was extracted and administered in pill form, each pill containing one-half of a grain, and one or two forming a dose, according to circumstances. This is perhaps the most acceptable form in which to administer the drug, and the therapeutic effects obtained have been practically the same. These therapeutic effects are classed as follows:—

1. Night sweating becomes proportionately lessened, according to the amount of the drug administered; and, if sufficient doses be given, becomes effectually checked or prevented, according to the time of administration.

This was observed to be the absolute rule in all moderate cases of phthisical night sweating where it was tried, and in one case, where the sweating was colliquative, agaricus brought the sweating within moderate limits; though probably, if sufficient doses had been given, it might have cut it completely short. In other cases of sweating not dependent on phthisis the drug was found to work well; indeed, its most notable effect was observed in the case of a patient who had had sweating of the right side of his body and right leg persistently, at night, for eight months, and in which a dose of ten grains stopped the symptom for a night almost at once.

Indeed, in the quickness of its action, agaricus resembles atropin. Like atropin, too, the effect is not permanent. In some cases, during the second night, sweating was found to be reduced below its average amount, or even entirely absent; but in the majority of cases, unless the drug was repeated, sweating returned as intensely as ever, and repetition of the drug during a considerable period does not appear to lead to any permanent result. Observation rather points to the necessity of gradually increasing the dose under such circumstances.

2. The effect of the drug against sweating is not more marked than its effect in promoting sound sleep, and relieving troublesome cough, especially of phthisis. This is the most notable fact to the patients themselves, a gradually increasing feeling of drowsiness following its administration in most cases, and this I can confirm from personal experience. In one case in particular, characterized by extremely troublesome and painful coughing during the night, to combat which numerous remedies had been tried with little or no effect, after the first large dose of tincture of agaricus this symptom became entirely subdued, and the patient had sound sleep. Her cough has since been effectually kept under by the remedy. In another case of severe spasmodic cough, of nervous origin, agaricus gave considerable relief when first administered.

The antihydrotic and soporific effects of the drug are probably distinct from one another, and not to be related as cause to effect, since, in some of the cases observed, sweating was always complained of as occurring *during* sleep, the body being covered with perspiration on awaking. Cessation of cough may, however, be the result of the soundness of sleep.

3. Strict investigation seemed to show that the drug has considerable influence in reducing the temperature, in cases of phthisis at least, where the fever is unstable, as much as two degrees of a fall having been observed within half an hour after administration of $\frac{1}{12}$ of a grain of agaricine. Such a marked result was not always obtained by repetition of the experiment in different cases; but the fall observed in this way averaged 1.4°, and had its expression in a relieved feeling on the part of the patient.

Along with the effect on temperature, it may be noted that the rate of the pulse becomes usually reduced to a corresponding degree, but this effect has not been invariably noticed.

Reasoning from the analogy of the effect of nitrite of amyl on the blood pressure, I compared, in five or six cases, sphygmographic tracings immediately before and half an hour to an hour after the administration of the drug. I was not surprised, however, knowing the difficulty of registering fine differences in pressure by means

of a sphygmograph, to find in most cases no discernible difference. In one case, nevertheless (probably one of more than usual susceptibility to the remedy), several trials showed that the tracings of the pulse, which, when uninfluenced, had a decided leaning toward the characters of dicrotism, after the administration of twenty grains, came to assume characters pointing to greater tension, the aortic notch diminishing or entirely disappearing. The rate of the pulse at the same time fell from six to twenty beats. These observations may have some bearing on the rationale of the effects of the drug, but they are far from free from the chance of fallacy.

Since the administration of the tincture was begun, complaints of sickness were only heard in *one* case, in which the drug had been given over a considerable period. Diarrhœa was only occasioned once, and that in a case where this symptom recurred at intervals, independently of the drug. Its laxative action, indeed, was noticed by some patients as very satisfactory. Dr. Wolfenden found that such diarrhœa could be averted by combination with one or two grains of Dover's powder. No other bad effects have been observed.

Good results have also followed its use in some of the other wards in the Western Infirmary. A sufficiency of the principle of the drug has not yet been obtained to make up a solution for hypodermic injection. Probably the effects following on this method of administration will be even more decided.

No comparative trial of its merits as against other medicines with similar effects was made, the object sought for having been rather to confirm it as a drug at once innocuous and thoroughly to be depended upon against night sweating when administered by the mouth.

Dr. Wolfenden's remarks on this point may be quoted in conclusion: "Having made extensive trial of those remedies commonly in vogue for checking the debilitating night sweats of phthisis, I have found many sadly wanting, and only *one* —viz., atropin—that yielded really excellent results. Given in $\frac{1}{75}$ of a grain doses it rarely fails. But atropin is a drug of great power, and capable of producing great physiological effects; and, although accidents are very rare, such an accident as an overdose might easily occur, and dispensing is not always faultless. . . . . The complete success of agaricus has led me to consider it of value equal to atropin, and superior to atropin, from the fact that it is quite innocuous. . . . . I believe it to be a preparation worthy of extensive trial, and of such equal efficacy with atropin that it may supplant it."

Homicide by Infection.

Dr. A. D. Leith Napier thus writes to the *British Medical Journal*:—

Your pertinent article on Homicide by Infection, in the *Journal* of February 4th, has suggested to me the propriety of addressing the profession, through the *Journal*, regarding certain generalities connected with the subject of puerperal septicæmia.

There is, unquestionably, some want of unanimity in the minds of the profession on the question what puerperal fever really is. That it is not, in the great majority of cases, one specific disease, is allowed by all, or by nearly all. That it is never a specific disease, is held by most authorities of repute. That there is a specific disease, if we desire to abolish the name puerperal fever, say a distinct septicæmia, which, at times, is liable to become epidemic, is still believed by some who have carefully investigated recent outbreaks.

Among many, the late Drs. Fleetwood Churchill, and Alfred McClintock, and Dr. Matthews Duncan, have stated the non-necessity for a practitioner who has charge of cases of puerperal septicæmia ceasing from obstetric practice. Others have strongly insisted that, in the event of two or more cases of puerperal septicæmia occurring consecutively in practice, a lengthened period of interruption from attendance in midwifery is absolutely imperative.

The discussion, in 1875, in the London Obstetrical Society, beyond arriving eventually at an opinion that the disease called puerperal fever was not a disease, but, as had been previously stated by Dr. Farre and others, many blended together, in no way advanced the pathology of the affection. Since then, little more has been done. One notable exception is Dr. Matthews Duncan's elaborate demonstration, that puerperal fever is non-epidemic. My own papers, contributed to the *Obstetrical Journal* (July to December, 1880), endeavored to establish various propositions. 1. At certain times large numbers of parturient women are attacked with fever, followed by secondary evils. 2. This fever is not solely dependent on septic material conveyed manually. 3. It is not dependent on erysipelas. 4. It is not ordinary septicæmia or pyæmia. 5. It is communicable by contagion. 6. As in other fevers (*e.g.*, typhus, typhoid, scarlatina), complications frequently appear, varying in their nature, as the constitution of the patient, and the surrounding hygienic arrangements may vary. 7. Like other blood-poisons, it is most virulent in hospitals, or where large numbers of lying-in women are crowded together. 8. It is a distinct disease from its complications—peritonitis, metritis, öophoritis, phlegmasia, etc. 9. It is infectious to the fœtus in utero, or the new-born child, as are smallpox, measles, etc. 10. The lower animals are simultaneously affected. 11. When the disease runs its normal course, the post-mortem appearances are not more inconstant than in other fevers. 12. In the course of an epidemic, like all general epidemics, "a wave" is usual; after it has become epidemic, incoming strangers are more liable to infection than habitual residents, etc.

These views were not the outcome of theoretical musings, but deductions derived from a close study of the clinical aspects of the question. They are offered for the consideration of all who care to accept clinical work as the basis of a scientific distinction in disease. I am aware that improvements might be made on my method of statement, but refer the readers of your *Journal* to the above-mentioned cases and extended remarks for fuller particulars. The inquiry, originated by Dr. Braxton Hicks, in the *British Medical*

Journal for January 22d, 1876, most unfortunately was not taken up by the members as it should have been. A more important inquiry than "What is the requisite quarantine after attendance on puerperal fever?" could not well be originated. Except the replies of the late Dr. F. Churchill and mine, in the *Journal* for March 25th, 1876, no other was forthcoming.

The important experiments recorded in recent numbers of the *Journal*, by Dr. Braidwood and Mr. Vacher, seem to show that septic infection may result from normal lochia; and that, under certain conditions, this may be enormously increased in potency. For clinical purposes, these experiments prove almost too much, as, with a lacerated perineum, which has been demonstrated by Snow, Beck, Duncan, etc., to be a most common condition after labor, puerperal fever ought, theoretically, to occur much more frequently than it does. The predisposing causes of bad general health, physical and mental, etc., must naturally be deemed important; but, whatever differences may pertain regarding the causation of the condition, theoretically, practically the individual responsibility of an attendant, in disseminating infection, must be of the greatest importance. If midwives are to be registered, and entrusted with such powers and privileges as is proposed by the Parliamentary Bills Committee, and reported in your issue of February 11th, it is highly desirable that no uncertainty should remain concerning these momentous questions of quarantine or no quarantine; of disinfection, and what disinfection; of culpability or criminality, or not? To determine these points, I think it would be advisable to obtain a series of short articles, of as practical bearing as possible, from members of the Association; and to refer the matter to the Investigation Committee, or a special committee, who would collect evidence and statistics, which might be afterwards drawn up and circulated throughout the profession. Unless the members really interest themselves, and give as full information as possible, the labors of any committee must needs be futile. In addition to the etiology, recent methods of treatment, *e.g.*, quinine, carbolic acid, sulpho-carbolates, Warburg's tincture, aconite, etc; prophylaxis by disinfectants, carbolic acid, permanganate of potash, turpentine, iodine, etc., might be embodied in the inquiry.

I have only outlined what I might have dwelt on at much length, but hope the matter may prove sufficiently attractive to be taken up heartily by the members.

Strangulated Hernia; Complications; Recovery.

From the *Medical Times and Gazette* we note the following case, which occurred in the Liverpool Royal Infirmary, under the care of Mr. Rushton Parker: John D., aged thirty-four, a laborer, was admitted on October 8th, 1880, on account of a right inguinal hernia, five days old, and two days strangulated. Mr. Harrison reduced the hernia the same day, at his visit, but was not perfectly satisfied with the feel and look of the parts; so, being about to leave town for a few days, he explained his impression to Mr. Parker, and requested him to watch the man, in the event of renewed emergency. The following day vomiting had occurred, the patient was uneasy, the site of the hernia was a little swollen, but evidently devoid of contents, and the neighborhood tender. But the pulse was about eighty and the temperature about normal. No wind had now passed for three days; but there was no distention or hardness of the belly. Water and filtered beef tea were alone permitted. Twenty-five or so drops of laudanum were given by the mouth, to be repeated night and morning, unless obviously not required. He continued fairly comfortable and quite contented under this treatment for the following days, showing no change except an increasing fullness of the belly, with disappearance of the tumefaction over the inguinal canal; the pulse and temperature also remaining about the same. No wind was passing; but no abdominal symptoms were apparent, except a tympanitic condition, with its consequent and increasing discomfort. The foot of the bed was elevated and the relief to the abdomen was appreciated but the size of the belly was increasing, and its tension too. Thirst was, of course, experienced, and it is not unlikely that it was too frequently and too copiously slaked.

On October 14th, the sixth day after reduction, the abdomen was punctured with an exploring trocar and canula, in three places, some fœtid gas escaping. Though the issue was small the tension was lessened, and the patient was pleased at the relief. The punctures were repeated on the two following days, and the distention thus kept within bearable limits. Then a copious liquid stool followed, the belly flattened down, and the patient continued to do well; the diet being carefully restricted to bread, potatoes, and beef tea or tea. The bowels remained sluggish after his diet was increased, and an occasional hot water enema was used after they appeared to be otherwise sound and free from tenderness; but a flabby and bagging condition of the lower abdominal front persisted almost throughout the convalescence. A local complication arose in association with the punctures, and prolonged the confinement to bed, though fortunately without masking the uninterrupted good progress recognized in the abdominal functions. Some fæces occasionally escaped by the trocar, which was protected by carbolized oil, and manipulated with deliberate care, to try to avoid intra-peritoneal effusion, with success. But a little escaped into the subcutaneous fat on the first day of puncture, and led immediately to a small, putrid abscess, which was opened, but not properly disinfected or drained at once. There followed, in consequence, a serpiginous phlegmon around the abdomen and flank, which was then progressively incised and treated with terebene and oil, washed through, and covered with gutta-percha tissue without rags. Some subcutaneous sloughs occurred, but were thus speedily disinfected, and rapid healing followed their issue. On one of the few days on which the bowels were punctured, at the height of their distention, the tongue became dry and the breath sweet. Whatever be the real significance of the latter feature, one could not help recalling its usual association with collapse and other forms of threatened or impending extinction, nor resist

the fear that failure was, after all, about to result. But as very little opium had been used—perhaps too little, considering the increasing flatulence—an extra dose was now given. Not many hours later came the copious evacuation, preceded by increased comfort, attributed to the opium.

Note.—The persistence of symptoms, after the release of the hernia, was regarded as the not unnatural result of an acute strangulation; yet it was not easy to decide between that, a functional maiming the effect of a bruise, and the physical constriction of a possible reduction *en masse*. The case forms an interesting and instructive contrast with No. 1 (February 4th, 1882), and it is obvious that but little was wanted in either patient, at the critical time, to turn the scale against him.

Puerperal Hemorrhage.

In the *American Practitioner*, Dr. Theophilus Parvin records the following case, in which he obtained most excellent results from hypodermic injections of ether:—

Mrs. K., thirty-seven years of age, was delivered of her third child at 7 A.M. The physician in attendance having failed to remove the placenta, and excessive hemorrhages occurring, I was sent for and saw her at 9 A.M. I found her almost pulseless, countenance with a death-like pallor, bathed with perspiration, restlessly tossing her arms, complaining that she could not see, that she was dying. Whisky and ergot had been given to her freely, and caused occasional efforts of vomiting. My first step was to remove the pillow and bolster from under her head, and to have the foot of the bed raised so as to facilitate the flow of blood to the anæmic brain. Next, placing one hand on the abdomen, I could not feel the uterus. It was without form and flaccid as the abdominal wall itself. The other hand was introduced into the vagina, and from the vagina into the uterine cavity. I found that the cord had been torn loose close to the placenta, in vain efforts to extract the latter, which was free in the uterine cavity. The uterus was completely relaxed, as flabby and soft as a "piece of wet tripe." In vain I sought, by compression and friction through the abdominal wall with one hand, and by movements of the other within the uterine cavity, to excite contractions. I then removed the placenta and injected water at the temperature of 110°, but still there was no response from the muscular fibre of the uterus, although the patient complained of the heat of the water as it flowed out through the vagina, and her exhaustion became still more alarming.

Remembering the very favorable results obtained by Hecker, in uterine hemorrhage, from hypodermic ether, I injected twenty drops of sulphuric ether, and repeated the operation at intervals of from five to ten minutes, until one drachm and a half of the liquid had been thus introduced. Meantime direct stimulation of the uterus by friction and compression externally, and by a hand in the uterine cavity, was continued, and about the time the last hypodermic was used contractions first manifested themselves, and within half an hour the uterine retraction was nearly as complete as is observed after normal labor.

Of course, the patient's convalescence was very tedious. It was three weeks before she could sit up in bed without fainting. Nevertheless, her recovery was uninterrupted.

After briefly discussing the various local measures for arresting hemorrhage, Dr. Parvin concludes by saying, "But, whatever method may be resorted to for the arrest of the hemorrhage, it is of the first importance that the patient should be restored from her profound prostration. Among the means of this restoration probably none is so prompt and effective as hypodermic ether."

Pigmented Mole of Abdomen, Side and Back.

Dr. William H. Bull reports the following curious case in the *British Medical Journal*:—

L. C. was born on August 4th, 1880. Her parents are both strong, robust, and healthy-looking people, with good family history. The husband, twenty-four years of age, is employed as a mechanic in some large works. The mother, twenty-one years of age, had been married three years, and had one male child perfectly developed. When pregnant two months and a half with this, her second child, the mother states that she was frightened by a large black dog, which lay on the road while a cart passed by; and she, thinking it was a child about to be run over, screamed out, when the dog rose suddenly. There is no other history of a fright. The mother is reported to have always been passionately fond of dogs, and would nurse them for hours on her lap.

On August 4th, 1880, she was attended by a midwife; and, after an ordinary labor, was delivered of this female child. The case was brought to me at the hospital when a fortnight old. I found the greater part of the skin of the abdomen, right side, and the whole of the back, from a line drawn between the axilla above down to the anus below, and extending down the right thigh, as far as the junction of the upper with the middle third, hypertrophied, superpigmented, and covered with hair one inch in length. The right labium was greatly enlarged, forming quite a flap, which almost completely covered the vaginal orifice. On every part of the body, from the crown of the head to the soles of the feet, there were a number of minute patches of pigment, varying in size from the point of a pin to a very small split-pea. The skin over these parts was perfectly smooth, and free from hairs. In all other respects, the child was well-developed.

In August, 1881, with the exception of a little stomachic and intestinal irritation at times, the child had enjoyed perfect health. Several more minute spots of pigment had appeared in different parts of the body, and some of the original ones had increased somewhat in size. The hypertrophy of the thigh had extended downward three-fourths of an inch; but the abdomen, side and back, remained unaltered.

A case of this kind becomes one of surgical curiosity, rather than of surgical importance; and calls for but few remarks. I have been unable to find any case on record exactly similar to this; but specimens of less severity, and

more limited in extent, have been reported. Such cases open out a wide field for discussion upon the important subject of "maternal impressions."

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——On the Brains of Criminals. By William Osler, M.D., Montreal. Reprint from the *Canada Medical and Surgical Journal*, February, 1882.

——"Rande" (Charles C. Scott); a medico-legal record. By one of the expert witnesses. Reprint from the *Alienist and Neurologist*, April, 1882.

——The Use of Constitutional Remedies in the Treatment of Ear Diseases. By Samuel Theobald, M.D. Reprinted from the *Medical News*.

——On some points in the Etiology and Pathology of Ulcerative Endocarditis. By William Osler, M.D., Montreal. Read before the International Medical Congress.

——Some points regarding the Diagnosis of Uterine Anteflexions and Anteversions. By Clifton E. Wing, M.D., of Boston. Reprinted from the Boston *Medical Journal*, February 9th, 1882.

——Moral (Affective Insanity); a Plea for its Retention in Medical Nomenclature. By C. H. Hughes, M.D., of St. Louis. This is an abstract of a paper presented by the author to the International Medical Congress, 1881.

——Case of Obliteration of the Portal Vein (Pylephlebitis Adhesiva), by William Osler, M.D., M.R.C.P. Lond., Professor of the Institutes of Medicine, McGill University, Montreal, comes to us as a reprint from the *Journal of Anatomy and Physiology*.

——Note on the Microscopic Appearances presented by the Blood of Scarlatina and Typhoid Fever. By J. H. Kidder, Surgeon U. S. Navy. This paper comes to us from the office of the Surgeon General of the Navy. It is very interesting, and is accompanied by six photographic illustrations.

——Gunshot Wounds of the Abdomen; Fecal Fistula; Spontaneous Closure; Recovery; with remarks on Treatment; including a further consideration of the action and applications of quinine. By A. Sibley Campbell, M.D., Augusta, Ga. Reprinted from the Transactions of the Medical Association of Georgia.

——We have received the Third Annual Report of the State Board of Health, of Illinois, with the official register of physicians and medicines. The large States of the West are preparing health reports that are superior in completeness to those of our Eastern cities. Among other interesting statements, this report contains a complete alphabetical list of the medical colleges whose diplomas are recognized by the Board, with a table showing the course of study, fees and requirements.

BOOK NOTICES.

A Clinical Handbook on the Diseases of Women. By W. Symington Brown, M.D., member of the Gynæcological Society of Boston, Fellow of the Massachusetts Medical Society, etc. pp. 247. New York: William Wood & Co. 1882.

The author does not claim that his production is a text-book; he desires merely to furnish to physicians a small guide in the management of the most common diseases of women. The book is made up of well selected information from standard authorities, interspersed with cases from the experience of the author.

Illustrations of Dissections; in a series of original colored plates. By George Viner Ellis, Professor of Anatomy in University College, London, and G. H. Ford, Esq. Vol. II, pp. 217. New York: William Wood & Co.

This book, the first volume of which we have already noticed, constitutes the February number of Wood's Library of Standard Medical Authors. It is a very well illustrated and a very valuable book.

Manual of Dental Surgery and Pathology. By Alfred Coleman, L.R.C.P., etc. etc. Thoroughly revised and adapted to the use of American Students and Practitioners. By Thomas C. Stellwagen, M.A., M.D., D.D.S., etc. pp. 408. Philadelphia: Henry C. Lea's Son & Co. 1882.

A very well prepared and revised manual, that will no doubt prove of service to progressive dentists.

Annual Report of the National Board of Health, for 1879. From the Government Printing Office, Washington.

This volume is received, with the compliments of T. J. Turner, M.D., Secretary of the Board. It is a most valuable book, full of interesting and instructive statistics and maps.

Physician's Perpetual Visiting List and Pocket Reference Book of Medicine. By D. Tod Gilliam, M.D. J. Wendell Cole, Chicago. Illustrated. Price $1.00.

A very well arranged little book; it will answer the purpose designed very well.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

PROFESSOR SAMUEL D. GROSS.

The resignation of a teacher so distinguished, and his retirement from the active duties of instructing the young aspirants for medical degrees, is worthy of more than passing notice. For many years Professor GROSS has been cheerfully and universally accorded a preëminent position among the surgeons of America. His reputation has become international, and he is looked upon, wherever our science is recognized and appreciated, as one of the greatest living surgeons, one whose name will remain alive after the body shall have resolved itself into clay; a name that will be treasured and revered for ages to come, as we of to-day are wont to cherish the memories of Æsculapius, Hippocrates, Galen, Vesalius, Hunter, or McDowell.

Truly Professor GROSS is a great man. Great in everything that tends to make a man a MAN. Not only does he excell in his own particular study and pursuit, but also does he stand preeminent in all the requisites of a true and *gentle* man.

Born near Easton, Pa., on the 8th of July, 1805, he received a classical education at the Wilkesbarre Academy and the high school at Lawrenceville, N. J. He commenced the study of medicine with Dr. Joseph K. Swift, of Easton, and was subsequently, for two years, a private student under Prof. George McClellan. He graduated from the Jefferson Medical College in 1828, and began practice in Philadelphia, employing his leisure hours in close study, and in the translation of several standard French and German medical works, which were published. In 1830 he issued his first original work, "Diseases and Injuries of the Bones and Joints," in which particular mention is made of the use of adhesive plaster as a means of extension in the treatment of fractures, now so generally employed by surgeons of this and other countries. During the same year he returned to Easton. In 1833 he became Demonstrator of Anatomy in the Medical College of Ohio, at Cincinnati, and two years later, Professor of Pathological Anatomy in the Medical Department of the Cincinnati College. Here he delivered the first systematic course of lectures on morbid anatomy ever given in the United States, and while thus occupied composed his "Elements of Pathological Anatomy," the first methodical treatise on the subject ever published on this side of the Atlantic or in the English language. After four years he accepted the Chair of Surgery in the University of Louisville. For ten years he labored in this lecture room, and then, in 1850, resigned, to accept a similar professorship in the University of New York, just vacant by the retirement of the venerable Dr. Mott. At the end of the first session he withdrew, and at the earnest solicitation of his former colleagues, returned to his Louisville chair. In 1856 he was elected Professor of Surgery in the Jefferson Medical College, of Philadelphia, which chair he has continuously occupied until the present time.

Dr. Gross is a very voluminous author; in addition to the works already named, he has, among others, written his "System of Surgery," upon which his posthumous fame will most probably mainly depend: it appeared in 1859, has passed through five editions, the last, issued in

1872, being thoroughly revised and brought up to the existing state of the science. It was translated into Dutch, and published at Nieuewdiep, in 1863, and is the most elaborate and exhaustive work on Surgery ever written by one man. He edited a large work on "American Medical Biography," was one of the founders and chief editors of the *North American Medico-Chirurgical Review*, and is the author of numerous addresses on medicine, surgery and biography, of a "History of American Medical Literature," and of a "History of the Progress of American Surgery during the last Century." He is a member of the American Philosophical Society, of numerous medical societies in the United States, of the Imperial Medical Society of Vienna; of the Medical Society of Christiana, in Norway; Royal Medical and Chirurgical of London; Medico-Chirurgical of Edinburgh; Medical Society of London, and British Medical Association, to which, on two occasions, he was an accredited delegate. He was one of the founders and early presidents of the Kentucky State Medical Society. While in Louisville, he published an elaborate and exhaustive "Report on Kentucky Surgery," in which he first established the fact that the late Dr. Ephraim McDowell, of Danville, in that State, was justly entitled to the honor of being the father of ovariotomy, until then erroneously ascribed to other surgeons. Shortly after settling in Philadelphia, he founded, in conjunction with Dr. Da Costa, the Philadelphia Pathological Society, of which he was the first president. In 1867 he was elected president of the American Medical Association and in April, 1870, presided at the Teachers' Medical Convention, held in Washington, to consider the subject of medical education. In June, 1870, he was chosen president of the Pennsylvania State Medical Society. In 1872, the University of Oxford, at its one-thousandth commencement, conferred on him the honorary degree of D.C.L.; that of LL.D. he had previously received from Jefferson College. He was unanimously elected president of the International Medical Congress which met in Philadelphia, in September, 1876.

Dr. Gross has always been a warm and decided advocate of professional progress and of a higher standard of medical education. Systematic and economical of time, he has, while punctually fulfilling all engagements as professor and practitioner, been enabled to maintain his early habits of earnest study, to keep thoroughly informed in medical and general literature, and to become a voluminous author. Large portions of his works have been composed while riding about the city in his daily professional routine. Such is a brief sketch of the life of this great and good man. It should be familiar to every student and young practitioner of medicine, since it would be impossible to select a better model, or to follow in the footsteps of a more perfect medical life, than that of the venerable professor who has just, to the regret of the universal profession, retired from public life.

GOVERNMENT CONTROL OF MEDICAL EDUCATION.

In the short space of an editorial, it will be impossible to adequately present the points involved in this extensive question. We desire merely to turn attention and thought in this direction. So long as schools and professors are dependent upon fees from students, for support, so long, necessarily, will the standard of medical education remain low. Such schools cannot afford to reject candidates. Such action would be throwing money away, and it is altogether too utopian to expect any man of mature years to be so reckless. Were the government to take control of medical education, as they have done with the postal, and ought to do with the telegraph service, the case would be far different. By establishing medical colleges, as mints are now located, at points deemed suitable, by installing a well paid corps of professors in each, and by establishing one final board of examination for all, said board being the only body in the country capable of conferring degrees, the standard of medical education could be readily elevated to any desired level. By refusing to grant charters to any individual colleges, quacks, under the guise of regular graduates, would be impossible. We know that the standard of ex-

amination for admission into the medical corps of the army and navy is much above that required for the reception of a degree from the average medical college. This is simply because the examiners in the former cases have nothing to make or lose by the candidates; hence, they can perform their duty honestly and conscientiously. With government control of medical schools, the same condition of affairs could be brought about. These few words form merely a prelude; we shall, in the future, discuss this vital problem more in extenso.

VIVISECTION.

Although so much has been already said on this subject, yet we cannot but rejoice when we find men of eminence fighting anti-vivisectionists with their own weapons. It has been frequently commented upon, that persons who view with horror the scientific mutilation of the lower, when the object to be attained is the benefit of the higher, class of animals, think it perfectly proper and legitimate to hunt to death and seriously wound poor inoffensive animals, with no nobler aim in view than merely to gratify their passionate inclination for sport. The best answer to anti-vivisectionists that we have for a long time heard, we quote in the following words from a daily cotemporary. Such arguments need no elaboration or comment; they plainly teach that "*people who live in glass houses ought not to throw stones:*"—

"Some little time ago Miss Frances Power Cobbe, who has so identified herself with the cause of anti-vivisection, called on a distinguished man of science, in London, to endeavor, by persuasive speech and *viva voce* argument, to gain him over to her cause. Three points were observable in Miss Cobbe's outward presentment, namely, she had an ostrich feather in her bonnet, a bird of paradise on or near her muff, and she carried an ivory-handled umbrella. Consequently, the distinguished man of science replied as follows: 'Madam, charity begins at home; when you have given up wearing ostrich feathers, which are plucked from the living bird, causing the most exquisite pain, and birds of paradise, which, in order to enhance their beauty and lustre, are skinned alive—when you have abjured the use of ivory, because you know that the tusks are cut out of the dying elephant's jaw—then, and then only, come and upbraid me with the cruelty of my operations. The difference between us is, madam, that I inflict pain in the pursuit of knowledge, and for the ultimate benefit of my fellow creatures; you cause cruelty to be inflicted merely for your personal adornment.'"

PUERPERAL SEPTICÆMIA.

In our *Periscope* we present a long communication on this subject, from the *British Medical Journal*, because we deem it a question worthy of the most careful thought and consideration of the profession. We have had a sad experience with this vague and indefinite condition, usually designated as "*puerperal fever*," having lost, during an epidemic in the Philadelphia hospital, more than thirty cases, out of a total of seventy-five lying-in-women. No medication seemed to have any influence on the terrible malignancy of the disease, which usually terminates fatally, within from three to four days of its onset. The most prominent symptoms, besides high temperature, were persistent and absolutely uncontrolable vomiting and purging; the patients really dying from exhaustion.

Realizing that knowledge of this terrible puerperal condition has not increased in the same ratio as our acquaintance with other diseased conditions, and considering how vague is our knowledge of its true etiology, therapeutics and pathology, we desire to direct research in this direction, and would urge our readers to carefully note clinically all that may tend to throw light on the history of this terrible affliction, and when they have made any valuable observations, to make them public.

Notes and Comments.

Congenital Club-foot.

The *Lancet*, editorially, offers the following sensible and valuable suggestions:—

It is unfortunate that so much of mystery and specialism hangs about the treatment of club-foot. It is too generally thought that it consists solely in tenotomies and the application of complicated and expensive shoes of various kinds, which none but the specially initiated can understand. And for this reason cases are often left untreated just when simple treatment would be most quickly successful; for club-foot, like every disease and deformity, is more amenable

to treatment in its early, uncomplicated stages, and many a case which in later years is cured only after long and wearisome treatment would have been comparatively easily dealt with in its earliest stages. The great objects to be attained in all cases of club-foot are to replace the part in its normal position, with the help of tenotomy where necessary, to retain it in that position for a sufficient length of time, and to exercise and stimulate the development of the weakened muscles. This can all be done in congenital club-foot from the earliest days, and ought to be commenced at once. The hand is the proper instrument to correct the deformity, and a plaster-of-paris splint just strong enough for its purpose the best means of maintaining the foot in its proper place. This splint, if made after the Bavarian pattern, can be removed every day, for the foot to be rubbed and electricity applied; or the more common form of plaster-of-paris splint may be removed for the same purpose every two to four weeks. If practitioners would treat their cases of club-foot in this way from the very first, many would be almost if not quite cured before the child began to walk, when the difficulty of treatment is necessarily increased.

Miners' Anæmia.

The *Lancet* says, in a communication to the Académié des Sciences, M. Perroncito has described an anæmia which occurs among the miners of St. Etienne, and which resembles closely the disease observed among the workmen at the St. Gothard tunnel, and found to depend on the anchylostoma duodenale. Examination of the stools of three patients at St. Etienne revealed in each large numbers of the ova of anchylostoma. This observation proves the identity of the two diseases. The same parasitic affection has been met with among the miners of Schemnitz. "Miners' anæmia" is thus brought into the class of preventable maladies, since it may be prevented or cured by the employment of substances which have been found capable of destroying the ova either outside or within the human body. The larvæ do not develop in the intestine, but in the fecal substances after dejection, and penetrate the organism by the air or water after their development. In no stage can an organism resist a temperature of 50° Centigrade, and the larvæ are quickly killed by a concentrated solution of chloride of sodium, in sulphuric or hydrochloric acid, in ethylic alcohol, or in one to five per cent. solutions of carbolic acid, and in one-half per cent. solution of thymic acid, and in ethereal extract of male fern. By any of these means the fecal larvæ can readily be destroyed. The male fern given internally is always effectual, even in a single dose. Thymic acid may also be given by the mouth, for the same purpose.

Treatment of Snake-bite.

Dr. Vincent Richards (*Indian Medical Gazette*, January) offers the following suggestions as to the treatment of snake-bite: 1. In the case of the bite being on a limb, a ligature should be at once applied above the bitten part, care being taken that it is sufficiently tight to prevent any blood being taken up into the general circulation from the distal end; give a full dose of opium (forty minims of the tincture, or half a grain of morphia) hypodermically. 2. Inject hypodermically, into the bitten part, a solution of the permanganate (one grain to a drachm), and well press the part with the fingers. 3. Open a vein below the bitten part, and wind round the limb an elastic bandage, so as to exsanguinate the limb below the bitten part. 4. Cut through the bitten part, and, when dry, apply pulverized permanganate, and then loosen the ligature. In the case of a person bitten on the trunk, any treatment, however prompt, may be useless; but it would be well to inject the part with the permanganate, and give a full dose of opium. "It may not be generally known to the members of the profession that a poisonous bite may be easily ascertained by cutting through the punctures into the areolar tissue beneath, when, if a red-currant-jelly-like appearance be observable, the bite is poisonous. The merit of pointing out the diagnostic value of this local appearance is due to Dr. Wall."

Poisoning by Nitrate of Potash.

In the *British Medical Journal*, Dr. Wolstenholme reports the following case. He was called to see a farm laborer, who complained of intense pain in the stomach. It was constant and of a burning character. On inquiry, it was found that he had taken an ounce of *salts*, about 7.30 in the morning. The *salts* did not taste quite the same as usual, but they were not sour. As soon as he had taken the salts, he felt the intense pain in his stomach. He felt sick, but did not vomit until four hours afterwards. His pulse was 56, full and strong; pupils normal, tongue moist, with white fur down the centre. No excoriations about the mouth or any signs of an irritant. An opiate was ordered to be taken

every hour, with hot applications to the epigastrium. Late in the afternoon he was called again. The same symptoms were presented. The patient now said he thought it was *saltpetre* he had taken, and this was subsequently demonstrated to be the case.

He was given a free emetic and a copious warm water enema, with one-fourth of a grain of morphia in pill every three hours. After the emetic and enema had acted, the patient was much easier, and made a gradual and steady recovery.

Disinfection of Urine.

In the *Medical Annals*, Dr. F. C. Curtis states, hydrate of chloral has the property of disinfecting urine. In August last he received a specimen of urine, four ounces, containing five grains of chloral to the ounce. No special care was taken to facilitate its preservation. It has been simply corked, and has been several times opened. It is now perfectly transparent, of a clear amber color, and has a fresh, urinous, slightly balsamic odor. A slight semi-flocculent deposit covers the bottom of the vial. The chemical analysis is identical with the notes made when it was recent: sp. gr. 1.015, acid, albumen one-fourth. The preservation of the albumen is a marked test. On microscopic examination, the epithelial cells are as perfect as in recent urine. No casts were noted and none are now seen. The specimen seems to be quite the same as when freshly voided, and is manifestly instructive and of considerable interest.

Mask Treatment of Eczema.

In the St. Louis *Medical and Surgical Journal*, Dr. R. W. Wilcox says, eczema of the face and head, so common in children, in many cases fails to be relieved, for the simple reason that the applications are not closely applied to the diseased surface. To remedy this deficiency a mask is here in use, a piece of cloth, with holes for the eyes, nose and mouth, with slits for the ears, to assist in keeping it in position. The ointment is to be thickly smeared over the mask, and it is to be worn constantly, only being removed as lotions are being applied. This treatment effectually prevents the scratching, which so thoroughly thwarts all endeavors. Any ointment can be used, but for the most part, diachylon, very carefully made, is selected. In something the same way a skull cap can be made, the inside of which, smeared with the ointment, can be used for eczema of the head.

Ataxy and Sewing Machines.

In the *Union Médicale*, M. Octave Guelliot contributes a valuable paper on two cases of locomotor ataxy in women employed on sewing machines. In hysterical women, working at the sewing machine seems to be, in certain cases, the occasional cause of the appearance of locomotor ataxy. The symptoms commence in the lower limbs and progress upward. Shooting pains traverse the limbs from below upward. Improvement is noticed when the patient rests, and it may last a long time. Working at the machine by means of a treadle probably acts chiefly by the concussion, which is diffused throughout the spinal cord. Therefore, the continuous movement of the treadle is dangerous to the work-woman, and endeavors should be made to substitute some other motor for the foot-power.

Hypertrophy of the Prepuce.

The *Lancet* says that Dr. J. Jatrondaky has forwarded brief notes and two photographs of a very interesting case recently under his care. The patient, nine years of age, had from birth suffered from general hypertrophy of the penis, which was principally marked in the prepuce, which formed a firm, nodular mass projecting far beyond the glans penis. This he amputated, and obtained union by first intention with a very good result. The patient and his parents had good health, and there was no other malformation or disease, so that Dr. Jatrondaky is unable to regard it as a case of elephantiasis, and considers the affection simply hypertrophy of the prepuce.

Cæsarean Section.

The *British Medical Journal*, of March 4th, editorially says: The patient suffering from epithelioma of the cervix uteri complicating pregnancy, whose case Dr. Edis brought under the notice of the Fellows of the Obstetrical Society at the December meeting, was taken in labor at term, on a Saturday evening, in the Middlesex Hospital. On Sunday morning Mr. Henry Morris performed Cæsarean section. The operation was performed in the interests of both mother and child. On the following Wednesday both mother and child were progressing favorably.

The *Louisville Courier-Journal* says: "Washington scene; deep-voiced guzzler.—'Hi waiter! bring me three more schooners.' Awe-struck spectators whispering—'That must be the new Secretary of the Navy.'"

Special Reports.

NO. IV.—ADULTERATIONS (Continued from p. 362).

FLOUR.

In the Cincinnati *Medical News*, Dr. Ephraim Cutter, of New York, records the results of an examination of some food stuffs. The quantity taken of each specimen was enough to make a thin circular film, three-quarters of an inch in diameter, thoroughly moistened with water. Power, 200 diam. For a *standard*, the "*Lost Nation*" Wheat Meal was taken. This wheat has a very large and well developed grain, of great beauty. The wheat was simply ground up, without bolting.

There were found starch bundles, some of them perfectly preserved, having the beard, and about 300 gluten cells. It follows, then, that a flour, to be perfect, should present 300 gluten cells in the above amount. Then follows a long list of flours examined, from which will be selected those found to be good and satisfactory. The Arlington Wheat Meal, made at Arlington, Mass., is accorded a very high rank, Dr. Cutter saying, "Many examinations, conducted during a long interval of time, show this to be rich in gluten, and in the coats of tegument. It is what it claims to be—a meal made from the best winter white wheat the market affords. It comes next to the standard meal alluded to above." The "Entire Wheat Flour", made at Lockport, N. Y., comes in for a goodly share of commendation. Several of the prominent farinaceous foods for children were submitted to examination, and found wanting in the elements of nutrition claimed, some of them being even inferior in nutritive value to common flours. The following test for ergot in flour, formulated by Zinnia, has been improved by Jacobs. The suspected flour is repeatedly boiled with alcohol; it is then filtered, and a little cold alcohol, previously acidulated with sulphuric acid, is added. The presence of ergot will be demonstrated, in a few minutes, by the appearance of a beautiful rose color on the upper layer of fluid, from the intensity of which tint the amount of ergot may be judged. Dr. Charles Stuart (*National Board of Health Bulletin*) states that manufacturers of flour do not use alum for adulterating, but that bakers use it in making bread, to render it whiter. Flour is sometimes adulterated with soapstone, to detect which the *Mining and Scientific Press* recommends the following: Burn a sample of the suspected flour; an excess of ash will betray the cheat. Before considering any new articles, it will be well to get a definite idea of what is meant by adulteration. The *National Board of Health* thus defines adulteration:—

(*a*) *In the case of Drugs.*

1. If, when sold under or by a name recognized in the United States Pharmacopœia, it differs from the standard of strength, quality or purity laid down therein.

2. If, when sold under or by a name not recognized in the United States Pharmacopœia, but which is found in some other pharmacopœia or other standard work on materia medica, it differs materially from the standard of strength, quality or purity laid down in such work.

3. If its strength or purity falls below the professed standard under which it is sold.

(*b*) *In the case of Food or Drink.*

1. If any substance or substances has or have been mixed with it, so as to reduce, or lower, or injuriously affect its quality or strength.

2. If any inferior or cheaper substance or substances have been substituted, wholly or in part, for the article

3. If any valuable constituent of the article has been, wholly or in part, abstracted.

4. If it be an imitation of, or be sold under the name of, another article.

5. If it consist, wholly or in part, of a diseased, or decomposed, or putrid, or rotten, animal or vegetable substance, whether manufactured or not, or in the case of milk, if it is the product of a diseased animal.

6. If it be colored or coated, or polished, or powdered, whereby damage is concealed, or it is made to appear better than it really is, or of greater value.

7. If it contain any added poisonous ingredient, or any ingredient which may render such article injurious to the health of a person consuming it.

Sec. 10. The term "food," as used in this Act, shall include every article used for food or drink by man. The term "drug," as used in this Act, shall include all medicines for internal or external use.

The following is the law to prevent the adulteration of food and drugs, passed by the legislature of New York, and signed by the Governor, June 2d, 1881:—

Section 1. No person shall, within this State, manufacture, have, offer for sale, or sell, any article of food or drugs which is adulterated, within the meaning of this Act, and any person violating this provision shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be punished by fine not exceeding fifty dollars for the first offence, and not exceeding one hundred dollars for each subsequent offence.

Sec. 2. The term "food," as used in this Act, shall include every article used for food or drink by man. The term "drug," as used in this Act, shall include all medicines for internal or external use.

Sec. 3. An article shall be deemed to be adulterated within the meaning of this Act:—

[In the case of drugs. (1) If, when sold under or by a name recognized in the United States Pharmacopœia, it differs from the stand-

ard of strength, quality or purity laid down therein. (2) If, when sold under or by a name not recognized in the United States Pharmacopœia, but which is found in some other pharmacopœia or other standard work on materia medica, it differs materially from the standard of strength, quality or purity laid down in such work. (3) If its strength or purity fall below the professed standard under which it is sold.]

[In the case of food or drink. (1) If any substance or substances has or have been mixed with it so as to reduce, or lower, or injuriously affect its quality or strength. (2) If any inferior or cheaper substance or substances have been substituted, wholly or in part, for the article. (3) If any valuable constituent of the article has been, wholly or in part, abstracted. (4) If it be an imitation of, or sold under the name of, another article. (5) If it consists, wholly or in part, of a deceased, or decomposed, or putrid, or rotten, animal or vegetable substance, whether manufactured or not, or in the case of milk, if it is the product of a diseased animal. (6) If it be colored, or coated, or polished, or powdered, whereby damage is concealed, or it is made to appear better than it really is, or of greater value. (7) If it contain any added poisonous ingredient, or any ingredient which may render such article injurious to the health of a person consuming it: Provided that the State Board of Health may, with the approval of the Governor, from time to time declare certain articles or preparations to be exempt from the provisions of this Act; and provided further, that the provisions of this Act shall not apply to mixtures or compounds recognized as ordinary articles of food, provided that the same are not injurious to health and that the articles are distinctly labeled as a mixture, stating the components of the mixture.]

Sec. 4. It shall be the duty of the State Board of Health to prepare and publish, from time to time, lists of the articles, mixtures, or compounds declared to be exempt from the provisions of this Act, in accordance with the preceding section. The State Board of Health shall also, from time to time, fix the limits of variability permissible in any article of food, or drug, or compound, the standard of which is not established by any national pharmacopœia.

Sec. 5. The State Board of Health shall take cognizance of the interests of the public health, as it relates to the sales of food and drugs, and the adulteration of the same, and make all necessary investigations and inquiries relating thereto. It shall also have the supervision of the appointment of public analysts and chemists, and upon its recommendation, whenever it shall deem any such officer incompetent, the appointment of any and every such officer shall be revoked and be held to be void and of no effect. Within thirty days after the passage of this Act the State Board of Health shall meet and adopt such measures as may seem necessary to facilitate the enforcement of this Act, and prepare rules and regulations with regard to the proper methods of collecting and examining articles of food or drugs, and for the appointment of the necessary inspectors and analysts; and the State Board of Health shall be authorized to expend, in addition to all sums already appropriated for said Board, an amount not exceeding ten thousand dollars, for the purpose of carrying out the provisions of this Act, and the sum of ten thousand dollars is hereby appropriated out of any money in the treasury not otherwise appropriated, for the purposes in this section provided.

Sec. 6. Every person selling, or offering or exposing any article of food or drug for sale, or delivering any article to purchasers, shall be bound to serve or supply any public analyst or other agent of the State or local board of health appointed under this Act, who shall apply to him for that purpose, and on his tendering the value of the same, with a sample sufficient for the purpose of analysis of any article which is included in this Act, and which is in the possession of the person selling, under a penalty not exceeding fifty dollars for a first offence, and one hundred dollars for a second and subsequent offences.

Sec. 7. Any violation of the provisions of this Act shall be treated and punished as a misdemeanor; and whoever shall impede, obstruct, hinder, or otherwise prevent any analyst, inspector, or prosecuting officer in the performance of his duty, shall be guilty of a misdemeanor, and shall be liable to indictment and punishment therefor.

Sec. 8. Any Act or parts of Acts inconsistent with the provisions of this Act are hereby repealed.

Sec. 9. All the regulations and declarations of the State Board of Health, made under this Act, from time to time, and promulgated, shall be printed in the statutes at large.

Sec. 10. This Act shall take effect at the expiration of ninety days after it shall become a law.

The work of analysis provided for by this bill is arranged under eleven heads and groupings, and allotted as follows:—

Animal Food. I. Milk, fresh and condensed. Assigned to Professor Chandler. II. Butter, dairy and artificial; cheese, lard, olive oil, and fruit essences. Assigned to Professor Caldwell, of Cornell University. III. Canned meats and animal foods; meats, fresh, smoked, salted, canned; extracts and essences of meat and fish; gelatine and isinglass. Assigned to Professor Chester, of Hamilton College.

Vegetable Food. IV. Cereals and the products and accessories of flour and bread foods. Assigned to E. G. Love, PH. D., of New York. V. Canned fruits and vegetables, pickles, preserves, spices, etc. Assigned to Professor Lattimore, of Rochester University. VI. Sugars, syrups, molasses, glucose, confectionery, honey, and soda-water syrups. Assigned to Dr. W. H. Pitt, Buffalo. VII. Tea, coffee, cocoa. Assigned to Professor Lattimore. VIII. Wines, beers, spirits, and cordials. Assigned to F. E. Engelhardt, PH. D., Syracuse.

Drugs. IX. Crude vegetable and animal drugs. Assigned to Frederick Hoffman, PH. D., New York. X. Pharmaceutical chemicals and their preparations. Assigned to Dr. Hoffman, XI. Organic preparations employed in medicines; cinchona, opium, etc., and their alkaloids; com-

mercial pills, coated and otherwise; ethers and essences. Assigned to Professor Caldwell.

The North Carolina Board of Health recently issued the following circular, which we glean from the North Carolina *Medical Journal*:—

To Householders and other persons interested in the prevention of the adulteration of food substances and medicines:—

The North Carolina Board, recognizing the widespread interest of the public in the rumored frequent adulteration of food substances and drugs, desires to give every facility to detect adulterations or quiet unfounded suspicions. While the Board does not share in the frequent public statements of the harmful adulteration and cheats in the food we eat, the liquids we drink, and the medicines we give, it was deemed advisable to offer as many as desired it, up to the full capacity of the laboratory, analysis of suspected articles. The list of articles given below need not be the limit of the inquiry, but may serve to direct attention to the class of articles:—

FOOD SUBSTANCES.

Soda, saleratus, baking powder, cream of tartar, sugar, milk, butter, liquors, flour, etc., etc.

DRUGS.

Paregoric, laudanum, quinine, opium, and such articles as are usually sold for domestic use.

Upon application to the superintendent of health of your county, you can procure the necessary information. It is the intention of the Board to pursue the subject patiently, and upon these investigations to determine whether they will advise the State to enact laws upon the subject.

WATER.

The complete analysis of suspected water requires much chemical skill, but the more common impurities may be detected by simple tests. Among the most important impurities, the Boston *Journal of Chemistry* recognizes the *nitrates*, the presence of which is chiefly significant as showing that organic matter has been acted upon and may be present. The danger is not in the salts themselves, but in their source, which should, if possible, be detected. To examine water for nitrates, put a small quantity of it in a test tube; add an equal quantity of pure sulphuric acid, using care that the fluids shall not mix; to this add, carefully, a few drops of a saturated solution of sulphate of iron. The stratum where the two fluids meet will, if nitric acid be present, show a purple, afterward a brown color. If the nitric acid be in minute quantities, a reddish color will result. The presence of ammonia, if in excess, can be determined by treating the water with a small quantity of potassic hydrate. Ammonia, if present, will be liberated, and may be recognized by its odor, or by the white fumes of chloride of ammonium, when a glass rod wet with muriatic acid is passed over the mouth of the test tube. If chlorine is present in any form in water, it is evidence that sewage contamination in some form exists. The presence and amount of chlorine may be ascertained by the following simple method: Take 9 grains of nitrate of silver, chemically pure, and dissolve it in 200 units, (say cubic centimetres) of distilled water. One unit of the solution will represent $\frac{1}{100}$ of a grain of chlorine. Take a small measured quantity of water to be examined, and put it into a glass vessel more than large enough to hold it. Add to the water a small quantity of the solution; if chlorine be present, a white precipitate will result. Repeat the addition, after short intervals, until no precipitate results. The units of the solution used will determine the hundredth of a grain of chlorine present. If more than a grain of chlorine in a gallon be present, reject the water, unless it can be clearly determined that the excess does not come from sewage. The water should be slightly acidulated with nitric acid before the test is applied.

HEISCH'S sugar test for the presence of dangerous organic matter is at once simple and trustworthy. Place a quantity of the water to be examined in a clean glass-stoppered bottle; add a few grains of pure sugar, and expose to the light, in a window of a warm room. If the water becomes turbid, even after exposure for a week, reject; if it remains clear, it is safe.

(*To be Continued*).

CORRESPONDENCE.

Compounding a Felony.

ED. MED. AND SURG. REPORTER:—

Permit me to thank you, warmly, for the honest and manly words at the head of this correspondence, found in your able editorials upon the recent action of the New York State Medical Society. During a professional life of more than a third of a century, it has always seemed to me that to consult with homœopaths was to *compound a felony*. How can it be otherwise, in view of the teachings of science and of infinitesimals? To me, it has been one of the incomprehensibles of life that, in the light of these teachings, we should be censured, as we often are, for declining to meet, professionally, those whose views of medicine and disease differ so widely from our own. Let honesty be the standard, and none who know this divergence can, for a moment, think of such consultation. Why, then, offer a premium for dishonesty?

That the masses should not fully comprehend the distinction between the two schools I can readily understand, and easily pardon; but, for those who claim to comprehend it, or, for those whom we have a right to believe should, I have

no such consideration. A request to consult with such brings a conviction that the welfare of the sick is not alone the object sought. Choice in physicians or remedies cannot be questioned. The same may be said with reference to the practice of medicine; but, that regular medicine can consult with those whose medical shibboleth is so unlike its own, or, that it is open to censure for refusing to do so, is positively without reason.

That a body of scientific and honorable men, such as we have hitherto supposed the Society referred to, should attempt to force coalescence, is without precedence. That it can be done will be found impossible. So long as "a right and a wrong exists," and we have regard for the right, so long must we decline to meet, professionally, homœopathic physicians. Any deviation from this Hippocratic rule is professional apostasy. With homœopaths, personally, I have no quarrel. Among them are some of my best friends. For their medical assumptions, however, I have a most profound contempt; as I have for those among them who, under the guise of homœopathy, practice regular medicine.

Osage, Iowa, March 21,'82. S. B. CHASE, M.D.

Contagious Headache.

ED. MED. AND SURG. REPORTER:—

We must modify our ideas of contagion. Col. R. G. Ingersoll was asked by a religious defender of the orthodox faith, if he, Ingersoll, could have had the making of the universe, what better he could do than has been done. Says the Col.: "For one thing, I would have made good health contagious, instead of disease."

In a limited measure, good health is contagious to-day. Not contagious in the sense of subtle fomites multiplying in a period of incubation, but by a law of total transfer. The good health of one person is exchanged for the morbid state of another person. Headache is one of the maladies contagiously contracted. Two relatives intimately known to the writer have been repeatedly afflicted in that way.

One, Mrs. R., is a nervous person of a spare habit and light complexion. She has a young lady friend who has had hip disease, and is often suffering from impaired health, and is frequently afflicted with headache. These two have been more or less intimate companions. On one occasion the friend said to Mrs. R., "It does me so much good to visit you; if I have the headache, I notice I soon get well of it when I see you." Mrs. R. laughed, and answered, "I am always glad to see you, but I guess I contract your aches, for my headache begins when yours leaves." Mrs. R. observed that this phenomenon occurred many, many times during this acquaintance of three or four years. Mrs. R. relates another instance where she took a violent headache by rubbing the head of another young lady friend who was laboring under a severe attack of the malady.

The other case is that of Miss P., a person of spare habit, light complexion, blonde hair. While indulging in a carriage ride with her uncle and a lady friend, one summer's day, the lady friend remarked, "How pleasant; this ride does me good. I started with a fearful headache, but it is now nearly gone." Miss P. answered, "Yes, this is a pleasant ride, but I guess I have taken your headache, for my head pains me severely, though I was perfectly well when we started. I do not understand it." Miss P. relates a similar experience which happened to her in S. F. These contagious maladies, in both these patients, would pass off in a few hours, or after a night's rest.

But the most unique part of Miss P.'s susceptibility is to be stated. She has a lady neighbor whom she visits once a week, quite regularly. This friend is "queer," and is subject to visitations of peculiar psychological states. When a social visit happens between them during the existence of one of these peculiar mental states in her friend, Miss P. contracts a headache; sometimes severe, sometimes less so, but always a painful cephalalgia. The friend does not admit that she has headache, but she experiences a confused, unpleasant cerebral "sensation." Coincident with this cerebral sensation in the friend is the cephalalgia of Miss P. But differing from that of other cases, and differing from the incidents with Mrs. R.—where headache contracted by the one was a headache relieved in the other—the semi-head distress of the friend did not leave with the accession of cerebral pain of Miss P.

There is no *coincident* explanation for this matter; for the phenomena have been occurring once a week to once a month, now, for three years.

What explanation for *contagious headache* will the medical faculty offer?

A. S. HUDSON, M.D.

Stockton, Cal., March 17th, 1882.

Forced Suspension of Respiration.

ED. MED. AND SURG. REPORTER:—

Text books of physiology speak of some effect on the circulation, but I have not seen a therapeutic effect ascribed to a suspension of respiration.

Having suffered very often from coryza, I tried the suspension of respiration, and with marvelous results. For the last two or three years I have taken no medicine whatever for it. My experience warrants me in saying that in the incipiency of taking cold it is a sure therapeutic procedure. Indeed, I think it of benefit in all congestions, active and passive, to the head.

My plan is quite simple: upon a partial inspiration cease breathing for 30 to 60 seconds and repeat after several respirations, and so continue until the desired effect is produced.

Columbia, S. C. J. D. F. LEVER, M.D.

Luxation of the Unciform Bone.

ED. MED. AND SURG. REPORTER:—

A few weeks ago I was called to see a railroad brakeman who had fallen from a freight car. In falling he had struck his hand against the car. He was found to have a simple luxation of the unciform bone anteriorly. It lay just beneath the skin, and its process could be distinctly outlined. Reduction was effected by direct pressure on the

bone, while the borders of the hand were approximated.

But few writers recognize a simple dislocation of this bone, and it is said that there are no recorded cases. JAMES G. BUCHANAN, M.D.

Allegheny City, Pa.

NEWS AND MISCELLANY.

Pennsylvania State Medical Society.

The thirty-third annual session of the Medical Society of the State of Pennsylvania will be held at Titusville, May 10th, 11th, 12th, 1882. The officers for 1882 are as follows: President, Jacob L. Zeigler, M.D., Mount Joy. Vice Presidents, Joseph A. Reed, M.D., Dixmont; W. Roland, M.D., York; J. M. Houston, M.D., Chester; W. Murray Weidman, M.D., Reading. Permanent Secretary, Wm. B. Atkinson, M.D., Phila. Recording Secretary, G. Thickstun, M.D., Wattsburg. Corresponding Secretary, O. H. Allis, M.D., Phila. Treasurer, Benjamin Lee, M.D., Phila. Committee of Publication, Wm. B. Atkinson, M.D., Phila.; Benjamin Lee, M.D., Phila.; O. H. Allis, M.D., Phila.; Wm. Goodell, M.D., Phila.; J. G. Stetler, M.D., Phila.; James Tyson, M.D., Phila.; Isaac Kerlin, M.D., Delaware City. Judicial Council, for one year, J. L. Stewart, M.D., Erie; John H. Packard, M.D., Phila.; Wm. Anderson, M.D. For two years, Wm. Varian, M.D., Titusville; Thos. Lyon, M.D., Williamsport; R. B. Mowry, M.D., Allegheny. For three years, Traill Green, M.D., Easton; H. L. Orth, M.D., Harrisburg; J. L. Carpenter, M.D., Pottsville. Committee of Arrangements, Wm. Varian, M.D., *Chairman*, Geo. O. Moody, M.D., Theo. J. Young, M.D., J. P. Hassler, M.D., E. H. Dewey, M.D., G. M. Dille, M.D., David Best, M.D., George W. Barr, M.D., E. M. Farrelly, M.D., G. L. Clark, M.D., D. M. Calvin, M.D., J. L. Stewart, M.D.

The attention of members and delegates is called to the following rules of order:—

RULE I. ORDER OF BUSINESS.—The order of business laid down by the Committee of Arrangements shall, when adopted, be rigidly adhered to, unless suspended, according to rule IX. Any person not ready to respond when his name is called shall forfeit his position in favor of the next on the list.

RULE II. LENGTH OF TIME OF ADDRESSES, ETC.—The stated annual addresses shall not exceed, in their delivery, thirty minutes, and voluntary communications, reports, etc. shall not exceed twenty minutes.

RULE III. UNFINISHED BUSINESS.—Matters unavoidably postponed, forfeited privileges, discussion of papers, etc. shall come under unfinished business.

RULE IV. NEW BUSINESS.—All matters not upon the programme must come under new business.

RULE V. EXCHANGE OF POSITION ON PROGRAMME.—Members may exchange position upon the programme, the exchange to be announced at the reading of the first substitute paper, report, etc.; the Secretary being notified in writing, and the same noted upon the programme of the President.

RULE VI. REGULATING DISCUSSION.—No person shall be allowed to speak a second time during a discussion, until all desiring to speak shall have had an opportunity; no speaker shall be entitled to more than ten minutes, except the reader of the paper, report, etc, who shall be entitled to fifteen minutes in closing the discussion.

RULE VII. PUBLIC NOTICE OF STATE SOCIETY.—Notice of the meeting of the State Medical Society, together with the programme, shall be made at least one month previous to the annual meeting; such notice to be published in the medical journals designated by the Committee of Publication.

RULE VIII. TO BE ESPECIALLY OBSERVED BY THE COMMITTEE OF ARRANGEMENTS.—The terms UNFINISHED BUSINESS and NEW BUSINESS shall form the last items of the programme for each morning and afternoon session.

RULE IX. SUSPENSION OF RULES.—The above rules shall not be suspended, except for a definite purpose, a definite time, and by unanimous consent of the members present.

PROGRAMME.

WEDNESDAY, MAY 10TH, 10 O'CLOCK A.M.

Society called to order by the President, Dr. Jacob L. Zeigler, of Lancaster county. Prayer, Rev. Henry Purdon, D.D. Reading the List of Delegates, Dr. William B. Atkinson, Permanent Secretary. Address of Welcome, Dr. George O. Moody, of Titusville. Report of Committee of Arrangements. Introduction of Delegates from other Societies, and of Visitors not Delegates. Report of Delegates to other Societies. Report of Corresponding Secretary. Calling upon Delegations for Members of Nominating Committee. Unfinished Business. New Business. Adjournment.

WEDNESDAY, 2 O'CLOCK P.M.

Amendments to the Constitution. Dr. R. S. Sutton offers the following:—

SEC. 2, ART. III of the Constitution shall be so amended as to read as follows: "Every member of a County Medical Society in Pennsylvania shall, so long as he is in good standing, be a member of the State Medical Society, and a delegate to its Annual Sessions."

Address in Surgery, 2.30 P.M., Dr. H. L. Orth, of Harrisburg. Reading of Voluntary Papers in the following order: "Gheel," Dr. S. S. Schultz, of Danville. "The Oleates and Oleopalmates in Skin Diseases," Dr. John V. Shoemaker, of Philadelphia. "Medicine and Something More," Dr. Traill Green, of Easton. "Procidentia and its Relief; With a Case," Dr. E. E. Montgomery, of Philadelphia. Unfinished Business. New Business. Adjournment.

EVENING SESSION, IN THE PRESBYTERIAN CHURCH.
7 o'clock, P.M.

Annual Address by the President, Dr. Jacob L. Zeigler, of Mount Joy. Adjournment. Receptions by citizens at their homes.

THURSDAY, MAY 11TH.

Convene at 9 o'clock A.M. Prayer, Rev. J. Allan Maxwell. Announcement of Nominating Committee. Reports of County Medical Societies.

Report of Committee on Schedule of Subjects for Preliminary Examination of Students, Dr. O. H. Allis, Chairman, of Philadelphia. Reports of Secretaries of County Societies of the number of Students under tuition, and the number examined by the Medical Examiners. Report of Committee on Defective Hearing of Locomotive Engineers, Dr. L. Turnbull, Chairman. Report of Treasurer, Dr. Benj. Lee, of Philadelphia. Address in Mental Diseases, 10 A.M., Dr. C. K. Mills, of Philadelphia. Reading of Voluntary Papers in the following order: "Some Questions Relating to Tonsillotomy," Dr. W. H. Daly, of Pittsburg. "Abscess of the Orbit," Dr. J. A. Lippincott, Pittsburg. "Hæmophilia, or the Hemorrhagic Diathesis," Dr. Thos. D. Dunn, of Philadelphia. "A Comparative Study of the Action of Certain Mydriatic Alkaloids," Dr. E. J. Jackson, of West Chester. Adjournment.

THURSDAY, 2 O'CLOCK, P. M.

Report of Nominating Committee. Address in Hygiene, 2.30 P.M., Dr. W. F. Muhlenberg, of Reading. Reading of Voluntary Papers in the following order: "Subjective Traumatism of the Eye, Dr. Wm. T. Little, of Philadelphia. "Treatment of Membranous Croup, with Cases," Dr. Wm. B. Ulrich, Chester. "Medical Relation of Prevailing Adulterations," Dr. Henry Leffman, of Philadelphia. "Puerperal Malarial Fever," Dr. B. E. Mossman, of Greenville. Unfinished Business. New Business. Adjournment.

THURSDAY EVENING, MAY 11TH.

Promenade Concert and Collation at the Oil Exchange, 9 o'clock P.M.

FRIDAY, MAY 12TH.

Convene at 9 o'clock A.M. Prayer, Rev. F. H. Rowley. Address in Obstetrics, 9.30 A.M., Dr. R. S. Sutton, of Pittsburg. Reading of Voluntary Papers in the following order: "Herniotomy, with a few Cases," Dr. E. Griswold, of Sharon. "Excision of Cartilage in Nasal Occlusion Due to Deviated Septum," Dr. Jno. B. Roberts, of Phila. "Clinical Notes," Dr. J. H. Musser, of Phila. "A Case of Ovariotomy," Dr. W. Varian, of Titusville. Unfinished Business. New Business. Adjournment.

FRIDAY, 2 O'CLOCK, P.M.

Reading of Voluntary Papers in the following order: "Management of the Perineum During Labor," Dr. Frances N. Baker, of Media. "A Rare Case of Nervous Disease," Dr. J. L. Stewart, of Erie. "Some Facts in Vaccination," Dr. G. W. Barr, of Titusville. "Hæmaturia," Dr. William S. Roland, of York. Appointment of Committees. Unfinished Business. New Business. Adjournment.

There will be a supplementary announcement of some other papers to be read, which will be furnished to our readers when issued.

RAILROADS.—The Pennsylvania Railroad and its branches will issue excursion tickets at the rate of two cents a mile. All who desire to avail themselves of this should notify the Permanent Secretary, stating the number of excursion orders required, and the railroad over which the party must travel to the place of meeting.

Titusville is located in Crawford county. The Allegheny Valley and Dunkirk Railroads both enter the town, which contains a population of over 11,000.

American Medical Association.

The Secretary of the Surgical Section of the American Medical Association requests all gentlemen who are writing papers to be read before that section at its next meeting to notify him at least one month before the time of meeting. And also to give at the same time the titles of their papers and their probable length. By so doing the titles will be published in time for the members to be prepared for the proper discussion of the various subjects. And he suggests that all gentlemen taking part in the debates reduce their remarks to writing, so that the report may be more accurate and valuable as a mirror of present scientific thought. Communications should be addressed to Wm. A. Byrd, M.D., Sec., Surgical Section, American Medical Association, 407 Jersey street, Quincy, Illinois.

OBITUARY NOTICE.

THOMAS POTTS JAMES.

On February 22d, 1882, Thomas Potts James died suddenly, at Cambridge, Massachusetts, of paralysis. He was born at Radnor, Pennsylvania, September 1, 1803. He has held the following positions: Fellow of the American Academy of Arts and Sciences, Fellow of the American Association for the Advancement of Science, Member and some time Officer of the American Philosophical Society, Treasurer of the American Pomological Society for 27 years, Officer of the American Pharmaceutical Society, and also of The Philadelphia Drug Exchange; Professor of Botany to the Pennsylvania Horticultural Society, Member of the Boston Society of Natural History, Honorary Member of the Massachusetts Horticultural Society, and of other kindred Associations.

Until within a few hours of his death, Mr. James was working on a Manual of North American Mosses, which he, in connection with M. Leo Lesquereux, was preparing for the press, giving the result of the study of the past forty years.

MARRIAGES.

HAYNES—FELLOWS.—On March 14th, 1882, by Rev. H. L. Jones, at the residence of the bride's parents, John R. Haynes, M.D., of Philadelphia, and Miss Dora Fellows, of Wilkesbarre, Pennsylvania.

DEATHS.

HENRY—On Monday, March 13th, of scarlet fever, Paul Gerard, youngest child of Dr. E. P. and Josephine B. Henry; on Sunday, the 26th, Josephine B., wife of Dr. E. P. Henry and daughter of the late Thomas D. Nancrede, and on Monday, the 27th, of scarlet fever, Frederic Nancrede, eldest child of Dr. E. P. and Josephine B. Henry, aged 11 years and 6 months.

LEON—On the 24th instant, Joseph M. Leon, M.D., aged 80 years.

MOORE—Suddenly, at Germantown, on Saturday morning, March 25th, Thomas Moore, M.D.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1312.] PHILADELPHIA, APRIL 22, 1882. [Vol. XLVI.—No. 16.

Original Department.

Communications.

PUERPERAL ECLAMPSIA.

BY L. S. MANNING, M.D.,
Of Manchester, Kentucky.

By way of preface I should say that the physician in this country is his own druggist and carries his supplies with him. What he does not have in the way of drugs or instruments he does without, since he can neither buy nor borrow for emergencies. Hence, the doctor, when he starts on a twenty-mile ride, has to select what he shall take and what he shall leave. To the patient it is far more important that he should take quinine than that he should take a thermometer; that he should take *veratrum viride*, rather than a sphygmograph. So when your country practitioner has made a selection of drugs, and crammed into his bags a few plasters, with a very few of the most common instruments, he has a load for his "one horse." These circumstances account for the omission of some important details in the histories following; and moreover, when at this terrible juncture the friends of the patient, in great anguish, are appealing to you for succor, if you do not lose your presence of mind, your attention will be wholly occupied with efforts of relief, rather than in the application of instruments of precision.

Case 1.—March 4th, 1874. Mrs. D., white, married, æt. 20, primipara. Saw her at 5 A.M. Has sore mouth and headache. Skin moist, pulse normal. Bowels and bladder just evacuated. Recurring pains at intervals of five minutes. Digital examination reveals the os uteri thin, dilating, dilatable, vertex presenting but not yet engaged in superior strait. 9 A.M. Very little advancement. Pains more frequent and stronger. Without warning, had a convulsion at 11.20 A.M., which lasted three minutes. After this administered Squibb's strong ether, by inhalation, but at 12 M. she had another convulsion. Ruptured membranes, used forcible dilatation, and pushed the ether, but not to the extent of complete anæsthesia. 2 P.M. Labor advancing; withheld ether, when she went into another convulsion. After this kept her under the partial influence of ether till the birth of a living male child, weighing nine pounds, at 3.30 P.M. Had used f℥ xij ether. Everything was arranged for the mother's comfort, but at 4 P.M. had another convulsion. Gave—

℞. Chloral, gr. xv
Potass. bromid., gr. xx,

in syrup, once in three hours. At 4.30 P.M. she lay moaning, skin hot, pulse 120. At 6 P.M. had another convulsion.

March 5th. No more convulsions. Patient could recollect none of the occurrences of the previous day. Mother and child doing well. Uninterrupted recovery.

Case 2.—April 5th, 1875. At 9 P.M. called to Mrs. W., married, multipara, æt. 24. Complains somewhat of frontal headache. Pains have been getting stronger and more frequent for some hours. Examination revealed os uteri dilating and dilatable. Had entered on second stage of labor, vertex presenting, first position. Three or four pains delivered a living female child with cord around its neck. Severed cord and passed the child to a nurse. In twenty min-

utes removed secundines entire. I should have stated that during third stage of labor gave fld. ext. ergot, ʒj, with brom. pot., grs. xxx. Applied binder, and everything was arranged for the mother's comfort. We were sitting around congratulating her upon her happy delivery, when, without any warning, she had one of those dreaded convulsions. When she began to breathe naturally again, administered chloroform by inhalation, to partial anæsthesia, whenever patient manifested restlessness, till 1 A.M., March 6th, when I gave her pulv. Doveri, grs. viij, which was vomited. At 4 A.M. the same was repeated and was retained. At 7 A.M. gave brom. pot., grs. xxx, with tr. verat. virid., gtt. vj, and repeated the same in four hours. 6 P.M. Has had several hours' quiet sleep. Recollects none of the occurrences of previous night after the convulsion.

April 7th. Mother and child doing well.

April 8th. Secretion of milk established. From this time on recovery was rapid and complete.

CASE 3.—May 7th, 1878, S. B., colored, unmarried, primipara, aged 19, very robust build; would weigh, perhaps, 185 pounds; attendants say she began staggering about and talking like a crazy person, twelve hours previous to my visit, 9 A.M. Had had a number of fits; none could tell how many. Was now comatose, tongue swollen and protruding, breathing laborious, frequent, stertorous; pulse 90 and small. Tied up the arms and opened a vein in each, at the elbow. Let the blood, which was of a very dark color, flow until it ceased spontaneously, when about ʒ xxx had been withdrawn. Found the pulse had improved. Attempted forcible dilatation of os uteri, but without success.

℞. Chloral, gr. x
Pot. brom., gr. xx,

in syrup every three hours. At 5 P.M. no more convulsions; breathing improved; tongue withdrawn; some feeble labor-pains, and labor had advanced to second stage; vertex presenting; fœtus evidently dead. If I had owned obstetric forceps, I would have delivered my patient at this time, but was forced to leave all to nature, only giving a cathartic to stimulate expulsive pains.

May 7th. During the past night she was delivered of a dead fœtus; still unconscious, and has evacuated bladder and rectum in bed, without warning. Ordered her to have ergot and quinine.

May 9th. Consciousness has returned, but recalls nothing of the events of the past three days. Complains of frontal headache, with great stiffness and soreness all over.

She made a rapid recovery.

CASE 4.—February 19th, 1880. F. W., single, white, primipara, robust and healthy. Had been complaining of headache and feeling badly for a day or two. Was taken with convulsions at 4 A.M., and I saw her at 2 P.M.; just passed through a convulsion. Tongue swollen and protruding, bleeding in places; breathing labored, frequent and stertorous; examination showed first stage of labor begun; os uteri thin, dilating and dilatable. Tied up both arms and punctured veins at elbow. The right arm bled to ʒ xx, the left refused to bleed.

℞. Brom. pot., gr. xxx
Morph. sulph., gr. ⅓,

every hour. Gave chloroform by inhalation, and attempted to turn and get hold of the feet, but without success. Chloroform was pushed whenever she manifested great restlessness. At 4.30 P.M. second stage of labor had been completed, and having no forceps with which to deliver the child, I made an incision in the vertex of the already dead fœtus, and inserting my finger, soon accomplished delivery.

I now found hour-glass contraction of the womb, but with a little time and considerable exertion delivered secundines entire; at the same time stimulating the uterus to contract by kneading. At 5.30 P.M. tongue withdrawn; breathing much improved; pulse soft and compressible.

℞. Calomel, gr. ij
Sulph. morph., gr. ¼,

every six hours.

February 20th. Consciousness returned during the night. She has no recollection of the occurrences of the previous day. Symptoms favorable.

February 25th. Recovered.

CASE 5.—November 28th, 1880. Called to see Mrs. M., æt. 28, white, married, the mother of four children, the youngest seven days old. In her confinement had been attended by a midwife, and nothing unusual was noticed, except the patient was despondent, and frequently spoke of dying. She also had persistent headache; had no dropsy, nor had received any injury. Forty-eight hours before I saw her all thought she was doing remarkably well, when suddenly she gave a loud scream, followed by another. She said her head had burst, that she was going to die, and implored her husband to take good care of the children. Shortly after this she had a terrible convulsion, requiring the strength of three men to hold her in bed, biting her tongue, and frothing at the mouth. She never regained conscious-

ness, and had convulsions, recurring at intervals of less than an hour, for the next eighteen hours. When seen by me she had had no convulsions for five or six hours; skin cold and clammy; breathing rapid and superficial; pulse almost imperceptible; eyes fixed and staring. In a few minutes death ended the scene. No *post-mortem*.

Case 6.—June 1st, 1881. Mrs. W., white, married, fourth pregnancy. Saw her at 7 A.M. Attendants said she had had two hard fits, about half an hour apart; that it still lacked two or three weeks of her term; that she had passed large quantities of urine the night before; that she had complained very much latterly of persistent frontal headache; that just before each fit she had vomited bile mixed with mucus and saliva. She now vomited again, and attendants warned me she would have a fit. In a few moments I saw her eyes become fixed, her face drawn strongly over the left shoulder. Then commenced one of those terrible convulsions seen only in puerperal eclampsia, with her face drawn strongly to the *left*. Convulsion lasted between three and four minutes, patient biting her tongue and frothing at the mouth; remaining comatose several minutes after convulsion ceased.

As this patient was not in robust health, I resolved to try the morphia treatment. I, therefore, dissolved sulph. morph., grs. ij, and gave at once, *per orem*. Upon examination I found feet and legs slightly œdematous, os uteri high up, *thin*, dilated to the size of half a dollar. Made strenuous efforts at further dilatation, with some success. Head presentation—head not large, and pelvis roomy. At 9 A.M. she began vomiting again, and, fearing another convulsion, I applied chloroform to her nose; but it was too late. She went off into another fearful convulsion, her head this time drawn strongly to the *right*. I now tied up her arm and bled to ℥ xx. I also gave hypodermic injection of one and one-half grains sulph. morph. into the cellular tissue, over deltoid muscle. This made her drowsy, and I made still further efforts at dilatation. At 11 A.M. her respirations numbered ten per minute, pupils contracted, pulse 80 and full. She made another effort at vomiting, followed by convulsion. I now had the temerity to dissolve two grains more of sulph. morph., and administer *per orem*. At 1 P.M. patient profoundly comatose, respirations eight per minute. Without premonition she had a violent convulsion. After this had ceased the outlook was gloomy, indeed. Respirations sighing, as if each one would be the last, and numbered only four per minute. By my attempts at dilatation the respirations improved slightly, and at the end of an hour's hard work succeeded in applying long forceps and delivering a living female child weighing seven pounds. Child seemed fully developed, was cyanotic, and respiration was established with some difficulty. The placenta being removed, the mother was put to bed. Respirations four per minute, and sighing. Kept up artificial respiration by elevating arms above the head and bringing them back again to the sides for some hours. Gave strong, black coffee, and stimulating doses of carb. ammon. with quinine.

June 2d, 8 A.M. Patient has just recovered consciousness; recollects nothing since first convulsion; respirations almost normal; pulse 60, full volume; complains of headache, and of being sore and stiff all over. The child lived but twelve hours.

June 3d. Patient continued to complain of her head for some weeks, and, aside from an occasional cathartic, she had

℞.	Potass. bromid.,	gr. xx
	Tr. hyoscyam.,	f℥ ss
	Tr. nuc. vom.,	gtt. v,

in syrup, three times a day.

June 30th. Patient able to be about the house, though still feeble and complaining of her head. At this writing she enjoys her usual health.

I offer a few deductions of my own, the value of which each one may determine for himself:—

1st. The division of puerperal convulsions into three classes, as is done by some obstetricians, is entirely without foundation. Hysterical convulsions are hysteria; epileptic convulsions are epilepsy; apoplectic convulsions are apoplexy; while puerperal convulsions, or eclampsia, are *sui generis*, and without relief, tend to death.

2d. I consider Case 5 to be the course of puerperal eclampsia when unchecked by medical art. I have the first case to hear from that recovered without aid.

3d. In Case 6, I would have the reader note; (*a*) The head drawn first to one side and then the other, showing that the irritant is equally in both hemispheres of the brain; proving, as I believe, that these attacks are not apoplectic: (*b*) That no amount of morphia compatible with life will arrest all cases of puerperal eclampsia.

4th. Note that frontal headache is a prodrome in every case; and in every case where the fact was noted at all the os uteri was thin and stubborn in character, and the labor-pains were irritating and inefficient.

5th. The temperature was not taken in these cases, but I do not think there was great depart-

ure from the normal in a single case, unless it was lowered.

6th. If the urine had been tested after convulsions were established, doubtless albumen would have been found, as it is in all cases in which respiration is interfered with, and hæmatosis is imperfect.

7th. I would treat puerperal women with persistent headache by the exhibition of brom. pot. and nux vom. At inception of labor would give xx grain doses of chloral. After a convulsion I would bleed, deliver as rapidly as possible, give chloroform by inhalation at evidences of recurring convulsions, since they recur rhythmically, and the time of one seizure passed over, there is a lull, so to speak, until the next period of excitation. I would use chloroform so long as convulsions threatened, and use only moderate doses of opiates or other drugs.

PAPILLOMA OF THE RIGHT VOCAL CORD FOLLOWED BY ACUTE PHTHISIS.

Read before the Philadelphia Laryngological Society,

BY JOS. B. POTSDAMER, M.D.

Mary M. first came under my care in September, 1879, presenting the following family history: Her mother died of "consumption of the throat?" following exposure to wet and cold. Two brothers died of scarlet fever. A brother and sister are living, in ordinary health. The sister has a goitre.

Her history is as follows: When four years old, she had an attack of scarlet fever with sore throat. Every following winter until her fifteenth year she suffered from an ulceration of the throat, which was never burnt, with the exception of when she had scarlet fever. She makes a statement that "it was swabbed at that time with some black stuff." From the symptoms, such as confinement to bed in a sitting posture, attended with fever, we would come to the conclusion that the recurring attacks of sore throat were severe. Besides, the patient was only able to swallow liquids, which caused severe pain in the sub-maxillary region.

When about fifteen years old, she used for her sore throat twenty drops of spirits of turpentine in gum arabic water, three times a day, for two days, when she was caught in a rain and was drenched. There or four hours afterwards she lost her voice, but partially recovered it the next day. For the dysphonia she consulted a physician, who burnt her throat, which relieved the attending pain, but not the hoarseness. A series of quack remedies followed. In the spring of 1875 she went to the Northern Dispensary, where she was told she would have to undergo an operation. She was examined with laryngoscopic mirrors. From here she went to the Brown Street College. Here a homœopathic physician gave her some powders without affording any relief. In the summer of this year she tried Case's inhaler.

In September, 1879, she came to the throat department of the Jefferson College Hospital. At this time she was nineteen years old, 4 ft. 8 inches high, and weighed 95 lbs.; general health good. Here she was examined by Dr. Isaac Barton and myself, but we were unable to obtain a view of the interior of the larynx, owing to the fact that the epiglottis was depressed. We then referred her to Dr. J. Solis Cohen, who also failed in obtaining a view of the larynx. He ordered that we should endeavor to draw the epiglottis up permanently, by raising it by means of the laryngeal forceps every other day. This treatment was diligently pursued for about a month without raising the epiglottis sufficiently to enable us to obtain a view of the interior. Shortly after this, Dr. Cohen, while examining the patient, announced that he had at last been enabled to see the vocal cords, and that there was a papular growth on the right one. This was the only time that a view of the interior of the larynx was ever obtained. In October of this year she called my attention to an enlargement of the thyroid gland, which disappeared completely under the local use of the tincture of iodine.

During December, the patient visited Dr. Cohen. While at his office one day, she had a slight hemorrhage, attended with a suffocative spasm. At this time she had occasional attacks of these spasms, for which the Doctor ordered nitrite of amyl.

On the 3d of January, 1880, I was called in attendance at her house, and found the patient suffering from marked dyspnœa. It was with the greatest difficulty that she could breathe. The respirations were hurried, short, and gasping. The pulse was over 120. This attack lasted thirty-six hours, was relieved by nitrite of amyl and large doses of bromide of potassium. The attack resembled the suffocative spasm of croup. The patient was unable to lie down; at times she grasped her throat, as if to relieve herself of a foreign body. At intervals during the attack the respirations were natural.

Taking all the circumstances of the case into consideration, I put her upon the following treatment: Tincture of the chloride of iron, cod-

liver oil, and the compound syrup of the hypophosphites. The physical signs of the chest at this time, about January 15th, 1880, revealed somewhat rough vesicular breathing, with clear percussion sounds. The patient improved during the spring and discontinued her visits in the early summer. About April of this year she called my attention to the fact that she missed her menstrual period. Thinking this one of the early symptoms of beginning phthisis, I told her not to worry, but wait a few months, and perhaps the periods would return of their own accord. The treatment ordered at the beginning of the year was not given with the idea that the patient was suffering from any lung trouble, but, considering her weak condition and the previous history, with the idea of preventing it.

On October 14th of that year she came to my office to consult me in regard to a cough. She told me that since she last saw me she enjoyed excellent health. On physical examination I found she was suffering from an ordinary attack of bronchitis, for which I gave her muriate of ammonia, and she was well in a few days. At this visit she told me she was married, and engaged me to attend her in confinement. I now saw her occasionally, examining the larynx and lungs. The former I was never able to see; the latter exhibited nothing abnormal. On December 28th I was called, about 8 o'clock in the evening, and was told she was in labor. On physical examination, I found she was suffering from dilating pains, which were infrequent, and continued so until the evening of January 4th, 1881, when, finding the os uteri dilated to the size of half a dollar, I applied a large belladonna ointment to it. This caused the os to dilate rapidly and the child was born a few hours later. After the ordinary period of "lying-in," the mother was able to go about as usual. Having a bountiful supply of milk, she nursed the child at the breast. I visited her occasionally, examining the lungs at times, but never detecting any change.

Toward the end of July she complained of pain in the left ear, accompanied by a purulent discharge. She went to the country before I had an opportunity to examine into the cause. Owing to the fact that the baby had ileo-colitis, she returned to the city on the 5th of August. I then examined the ear and found a perforation of the membrana tympani. The chest at this time revealed the following physical signs: right side, marked bronchial breathing, both anteriorly and posteriorly, with crackling at the apex. Marked dullness on percussion over the whole of this side of the chest. Left side: beginning bronchial breathing over all this side, more marked toward the apex; percussion sounds somewhat dull. From this time on the case rapidly progressed to a fatal issue. About the middle of October the patient occasionally had attacks of suffocation somewhat similar to those previously described. Toward the latter part of this month the right ear became affected in the same way as the left one. For a week prior to death the patient was troubled with a persistent diarrhœa. During the last month of life the pulse varied from 120 to 140 beats per minute; the respirations from 48 to 60 per minute; temperature from 99° to 100.5°. This lasted until November 11th, when she died. It was impossible to obtain a post-mortem examination.

Although she nursed her child up to within six weeks of her death, it was against my direct instructions. I insisted, early in the summer, that she should wean it, but she would not listen, and it was only when she became confined to her bed that she did so. The child, a boy, is at this time apparently healthy.

The patient always attributed the dysphonia to the use of the turpentine. Considering the history of exposure to wet and cold, followed by aphonia, I concluded that the origin of the larynx trouble was an acute laryngitis which the patient suffered from at that time. The failure of the inflamed larynx to return to its natural state is due partly to improper treatment. Still, owing to the tubercular dyscrasia, with the best of treatment I doubt whether the larynx could have been restored to its normal condition. I base this opinion upon the fact that cases of subacute and chronic laryngitis in patients with a tubercular tendency seldom recover entirely; but eventually tubercle is found in the lungs, and after a period of three or more years the individual falls a victim to the disease. Two cases bearing out this statement have been before the Society, one in the spring and the other in the fall of last year.

The laryngitis becoming chronic gave rise to the papillomatous growth. That this is not of infrequent occurrence, is a fact supported by some of the best authorities.

The statement of Dr. C., of the Northern Dispensary, in the spring of 1875, "that the case would require an operation," would indicate that he obtained a view of the interior of the larynx and saw a growth there.

The laryngeal symptoms of the case in question did not materially alter during the three years that the patient was under my care, except

that her voice was stronger in summer than in winter. During the last two or three weeks of the patient's life her voice was very weak, which I attributed to the extreme exhaustion, and not to any change in the tissues of the larynx.

The perforations of the tympanic membranes were due to the deposit of tubercle in them.

Whether this was a case of pure tuberculosis of the larynx, preceding the deposit of tubercle in the lungs, or whether it was a case of chronic laryngitis with a papillomatous growth on the right cord, followed by pulmonary phthisis, is a question which I am not ready to answer, owing to the fact of being unable to make satisfactory laryngoscopic examinations, and to the absence of a necropsy. If the former, it goes far to prove two mooted points, to wit: 1st. That the deposit of tubercle in the larynx may and does, at times, precede its deposit in the lungs. 2d. That cases of primary tuberculosis of the larynx may live longer than three years from the onset of the disease.

Hughes Bennett's article in Reynolds' System of Medicine, Vol. II, page 119, "On the Causes of Phthisis," says: "As a general conclusion, we hold to the belief that the great cause of tubercle is weakness of constitution, or diminished vital power, however produced."

This explains why my patient became a victim of pulmonary disease. She being a girl in delicate health, with laryngeal disease, going through life without a change either for the better or worse. She marries, becomes pregnant, and has a child. This child, notwithstanding instructions to the contrary, she nurses at the breast until unable to do so any longer. What is the result? The extra drain upon her system is more than her nature can withstand, and the fuel which was ready to be ignited suddenly takes fire and rapidly consumes the victim.

IMPACTED CERUMEN; SOME OF ITS CAUSES AND TREATMENT.

BY DR. GEORGE F. SOUWERS,
Of Philadelphia.

If there is one thing more than another the treatment of which the general practitioner dreads, and upon which, in our so-called great medical schools, either he or the student, owing to the lack of lectures and demonstrations, can obtain little or no information about, it is the ear and its diseases; and while we confess that the subject does not permit of much brilliancy in manipulations, nor of apparently startling results, yet we must admit that in dealing with a man's hearing we have almost as important a factor to dispose of as when his sight, locomotion, and speech are the issues involved. Aside from actual structural disease, by which we mean the involvement of the essential portions of the auditory apparatus and the nerve of audition, we find that there is no more common cause of deafness in all its modifications, from inability to hear slight noises and sounds to absolute loss of hearing, than the impaction of masses, either moist or dry, of cerumen; further, there is hardly any agency which can be productive of more irreparable injury, when allowed to remain undisturbed in situ, than this substance; for while it is a natural product of the canal in which it is found, and while a certain amount of it is essential to the well being of the ear, yet it is one of those blessings which, when enjoyed to too great an extent, results in a curse. In considering the disorder under discussion it may be well to place our remarks under certain general heads, such as the cause, production and varieties of impaction, its relationship to aural eczema, the symptoms, general and special, by which the complaint may be characterized, the best plans of treatment, etc., etc. And first, as to the cause of the disorder; at this season of the year we have in profuse perspiration and bathing the two most common causes of impaction, the mechanism being as follows: a small piece of cerumen is lying loosely in the auditory meatus; a drop of perspiration, or in bathing, a little water, finds its way into the canal and carries along with it the fragment, until its further progress is prevented by its coming in contact with the membrana tympani, against which it lodges. The victim of the accident does not at the moment particularly notice what has taken place, or if he does he simply supposes that a few drops of water have "gotten into his ear," as he expresses it, and that they will shortly work their way out. The fact transpires, however, that this desirable consummation does not take place, and after a time a certain sense of uneasiness and fullness of the meatus, and difficulty of hearing, make themselves manifest. As a means of relieving the condition, the patient instinctively inclines his head to the side affected, and goes through a series of jumping gymnastics, in the hope of dislodging the water. It may now take place that a gush of warm water escapes from the meatus, which, however, the patient finds does not altogether relieve him of his uneasy sensations. Instead of a cessation of his troubles, he now begins to experience a series of noises in the head and ears, which are as various as there are sounds under heaven,

the more common being those resembling the ringing of bells, the whistle of escaping steam, the roar of sea-shells, etc. Associated with this condition there may or may not be more or less pain, which will vary in character from the pricking of needles and pins to merely a sense of pressure, or the pain may even be sharp, shooting, and neuralgic in character, being felt over the supra-orbital, temporal, and posterior auricular regions.

The state above described may be, for convenience sake, styled the acute condition or stage of impaction; and while, of course, the picture may be drawn a little more vividly than is generally witnessed by the physician, yet it is a true picture. He does not see it often, for the reason that the case has generally passed into the second stage of the disease before it comes under his notice, or into that condition in which the acute symptoms having been borne by the patient, and having subsided, may better be classified as a chronic condition, in which impaction proceeds gradually, layer after layer of cerumen being deposited, and, in consequence, an increasing pressure made upon the drum-head.

Now, of course, a different and yet the same series of symptoms will take place ere the third stage of the trouble is reached. But before considering these new manifestations and the third stage, let us review a new agency in the production of the impaction. It is an old saying that cleanliness is next to godliness; we would paraphrase this axiom somewhat by adding to it that too much cleanliness is not unfrequently next to deafness. There be those who labor under the impression that to secure clean ears it is essential that the meatus be daily scoured out by copious drenching of soap and water, that it is necessary that a corner of a towel shall be twisted into something of a probe shape, and that this, being smeared over with Castile or other soap, shall be passed deeply and with a rotary motion into the ear. Others, again, employ bodkins and hair-pins in order to dig out the wax, whereas, in many instances, they only succeed in pushing a large proportion of it further in. It is not an unusual experience among those who have the opportunity of examining a large number of ears, to find the meatus occluded by a mixture of soap and cerumen, the former having been introduced as above noted, the rotary motion employed serving still further to lodge the soap in position and to push any loose fragments of cerumen further back into the canal. There seems to be set up, under the irritation of the alkalies in the soap, a condition of chronic aural eczema, which, in fact, has been so commonly noted in the aural clinic of Jefferson Medical College Hospital, by Dr. Laurence Turnbull and his chief assistant, Dr. Chas. S. Turnbull, to whom I am indebted for favors in the production of this paper, that the trouble is diagnosed and docketed as "soap eczema," into the modifications of which complaint we shall enter later. I have the notes of a case in which, mixed with the impacted cerumen were fragments of slate pencil which the boy admitted having introduced. There was present a state of acute eczema, the meatus being red and inflamed; in this case the pain resembled that produced by the pricking of needles and pins.*

We come back, now, to some of the symptoms of the stage of chronic impaction, and we find the patient complaining of loss of hearing, noises in the head, *itching of the aural canal*, neuralgias, indistinct tinnitus, which he refers to various parts of the head, troubles due to involvement of the sympathetic nerve, through the branches supplying the ear; at times some slight discharge. His condition may be better and worse at different times; there may be, at times, intense lancinating pains in the ear, or a neuralgic condition of the whole corresponding side of the face, referable at times to neuralgia of the teeth, and a variety of such symptoms. On testing the hearing by the watch, it is found decidedly deficient, though the sound of a tuning-fork struck and held in the air may readily be recognized, thus differentiating the trouble from catarrhal conditions. It is a curious fact, however, that in some of these cases of chronic impaction there is present no tinnitus, pain, nor discharge, the only symptom being gradual and persistent loss of hearing. Now the patient is apt to charge the condition upon having been repeatedly the subject of colds, and while we admit this statement in coming to a diagnosis, we must also remember that the condition is very apt to be the symptom of some local skin disease, more especially eczema in one of its four most common forms, and that when the impaction is due to disease of the external meatus, the color of the impacted cerumen is changed from the rusty red of a simple impaction of healthy cerumen, to any shade between rusty red and jet black, the exfoliation in cases of eczema being incorporated intimately with the cerumen. In those in whom malaria has obtained a seat, especially if they be the victims rather of the dumb than the frank variety of the disease, the indistinct feeling of numbness which is at times present in those suf-

* Notes Case 1011, Jefferson Medical College Aural Clinic, 1881.

fering under impaction of cerumen, affecting more especially the temporal and lateral facial regions, may lead to their being treated only for the malarial condition, the real cause of the trouble being entirely overlooked, and so, of course, not treated. I do not think that I am alone in having seen cases whose only symptom of malaria was a persistent, or at times recurrent, tinnitus and numbness, the trouble rapidly yielding to an anti-malarial plan of treatment. Now, there are cases with similar symptoms, in whom a close examination alone will reveal the exciting cause. As a cause of chronic impaction, the shape of the ear must be taken into account. In old women who wear caps with strings fitting down back of the ears, so as, in a manner, to jam the posterior walls of the meatus externus forward, as it were, thus narrowing the canal and bringing the walls in abnormally close apposition, thus deepening, while, at the same time, more or less occluding the channel through which the secretion should normally find free exit, impaction is a very common event. The concha being thus artificially forced forward results in the production of the state known as "box ears." Of course, such a mechanical factor would have to be considered when it came to the question of treating such a case.

In these cases of chronic impaction, whether in the second or third stage, which last we have yet to consider, and in which they are particularly marked, there may be many sympathetic symptoms, the irritation being transmitted through the ganglia of the sympathetic in this region, indistinct headaches, troubles in vision, etc., being very common, these disappearing when the cause of the disorder is removed. In some cases the patient, thinking to provide a remedy for what he supposes is an impending abscessed condition, from the symptoms present at times, applies a poultice. This application is occasionally followed by a more or less abundant serous discharge, especially in eczematous conditions.

After remaining in the condition which we have denominated the second stage of impaction, there gradually begins to take place a crystallization of the constituents of the first deposited layers of cerumen; the crystals of cholesterine shoot out and interdigitate, forming a whitish-gray pellicle or mass, which is not visible through the speculum until the more recent and still semi-solid deposits of cerumen have been removed. It is now that the great destructive agency of impacted cerumen is made evident. The constant pressure of the sharp crystals against the delicate membrana tympani eventually results in an irritation and consequent inflammation of that membrane, which, unless promptly checked by the removal of the exciting cause, results finally in its ulceration and total destruction. The mischief, however, does not stop at this point, but may go on to a true otitis media, the essential bones of audition become involved, and the ear, as an acoustic instrument, is rendered entirely worthless. Lucky indeed is the patient if the case does not go on, by reason of the involvement of the temporal bone and the production of meningitis, to a fatal termination. In examining an ear in which the pressure of the stage of crystallization of cholesterine is suspected it is necessary to employ the head mirror, as both hands should be entirely free, in order to make the necessary manipulations for the removal of the mass. In those cases where ulceration has not yet commenced the drum-head will be found more or less thickened, opaque, and sunken, and the adjacent integument of the meatus more or less swollen and inflamed, presenting, at points, certain florid granulations, the passage being extremely sensitive, not, at times, even permitting of the passage of the speculum. These granulations and the sensitiveness may not be discoverable till after the removal of the masses of desquamated epithelium which frequently occlude, more or less, the calibre of the meatus. We have said that the primary cause of impaction may be an eczematous state of the meatus auditorius externus, and the question may be presented for consideration as to what extent the eczema may proceed; it may be laid down almost as a rule, that a case commencing as primary desquamative eczema will pass progressively, if untreated, through all the stages ordinarily assumed by that disease. In the first stage there is present simply a scaly desquamative condition of the skin, accompanied by more or less itching and irritation, or sometimes there being no further inconvenience than the mere scaling. The disease is now in a state to be readily and promptly cured, the removal of the exciting causes alone, frequently, being all that is required; the chief exciting causes may be laid down as too frequent and too copious washing of the ears, especially when soaps of different kinds are freely employed; it matters not whether the finest Castile or the commonest brown soap is used, the results are the same. If allowed to proceed on its way uninterrupted, the disease soon involves the true skin or derm in its ravages; this step in its progress being manifested by the presence and discharge of a more or less copious serous secretion; from this condition the third stage, of

ulceration, is soon evolved, terminating frequently, after prolonged suffering and inconvenience, in a hypertrophic condition of the integument of the meatus. As to the treatment of these conditions we shall speak later, in summing up the method of cure in all the different forms of impaction. In taking the history of a number of cases of impactions of cerumen from different causes, one's attention is particularly drawn to the fact of the involvement of the throat and fauces in the difficulty, as well as of the mucous membrane of the nasal passages.

In looking over a record of cases treated at the aural clinic of the Jefferson College Hospital, service of Dr. Turnbull, who kindly placed the books at my disposal in preparing this paper, entries like the following are, *in part*, the rule, rather than exception: M. G., employed in spice mill; has no pain, tinnitus or discharge; hearing distance normal, or nearly so, in right ear; left meatus filled with desquamations; membrana tympani, left ear, thick and opaque; *nasal passages inflamed; chronic pharyngitis and enlarged tonsils;* the hearing impaired for four years past.

Again, Case No. 1015. Cannot hear watch on contact; the membrana tympani thick and sunken; *throat and tonsils swollen;* impaction of cerumen present, the meatus being in an eczematous, scaly condition; has used palm soap freely every day. In the case of J. O. the same history comes again to the fore: mucous membrane of the nasal passage slightly thickened; that of the throat in like condition, and tonsils enlarged; and so it is with numbers of others; so that it would be well, in all cases of impaction, for the physician to go a step beyond the state actually complained of, and to study the condition of the throat; and, in fact, the rule may be as well applied *vice versa*, in obstinate chronic pharyngeal inflammations.

The question of treatment of these different conditions may now appropriately be considered. In those cases where we have to deal with a simple uncomplicated condition of impaction, lukewarm water and a syringe may be all that will be required to restore the ear to a normal and healthy condition. Where, however, impaction has passed beyond such a simple means for its removal, medicinal agents must be called into requisition. The simplest remedy, then, is glycerine, either alone or in combination with a little water; the patient being placed with the head reclining toward the opposite side to that being treated, a few drops of glycerine are dropped into the meatus; having been allowed to remain in situ for some minutes, the ear should be washed out with a mixture of glycerine and water, and then thoroughly dried. These applications should not be made more than twice in the twenty-four hours, under any circumstances, for, if too often repeated, more harm than good may result. If, however, the means considered fail to afford relief, we have in borax a very efficient agent by which to accomplish the end desired, namely, such a degree of solution of the cerumen as will admit of its ready removal by the syringe. A very good formula for the employment of this drug is as follows:—

℞. Sodii bromid. pulv., ℥j
Glycerinæ
Aquæ, āā ℥ij. M
Sig.—Warm, and drop into the ear.

When the impaction consists of a crystalline mass, which, by ulceration, has destroyed the membrana tympani, and forced itself into the middle ear; or even when external to the membrane, it is almost useless to employ the syringe alone; the use of a long, delicately tapering forceps is necessary for the removal of the mass, care, of course, being taken not to roughly handle the parts that are already in a state of irritation. A solution of alum may then be applied twice a day, if the indications point to the employment of astringents. If the fauces, etc., require it, they should be treated systemically as well as locally, for in many cases the patient presents an anæmic state of the system. As a gargle he may employ chlorate of potash and muriate of ammonia. If, now, eczema is the agent at work producing the mischief, another plan of treatment must be pursued. The first and grand law is "absolute prohibition of the use of water, or of water and soap, for the purpose of cleansing the ears." This is a *sine qua non* for the success of whatever else may be done. In those cases where the eczema has simply progressed as far as the first stage, an ointment of the yellow oxide of mercury, made of the strength of from one to two grains of the oxide to the drachm of cosmoline, and applied thrice a day, not only to the meatus itself, but also to the membrana tympani, is very useful. If an ulcerative condition is present the nitrate of silver is the remedy *par excellence*. If, however, the hypertrophic stage of the disorder has been reached there is no better application than that of the ol. cad., by means of a camel's hair pencil. If the patient insists on cleaning his ears out, let him use the end of a dry towel upon which a little cosmoline has been placed, taking care not to force it far back into the meatus; but it would be far better if he did nothing in the

matter, but allowed only an experienced hand to conduct his case to a successful termination.

AN EXTRAORDINARY CASE OF MORPHIA POISONING.

BY H. PRAEGER, M.D.,

Of Bethlehem, Pa.,

Ex-Senior Physician and Surgeon to St. Luke's Hospital.

G. B. L., about 50 years of age, of South Bethlehem, Pa., on the morning of December 15th, 1880, complained of a sick or nervous headache, a not unusual thing with him. He took a dose of paregoric, but the pain did not diminish. A little later he took a pill of ¼ grain morphia; shortly after repeated the dose till he had taken three or four, apparently without any relief. He then sent for a physician of this place, who on his arrival administered a hypodermic injection of morphia. After an hour or so had elapsed, and no relief was felt, recourse was had to some more pills of morphia. After an hour or so, feeling no relief, he again sent for the Doctor, who administered another hypodermic injection of morphia; this was now about seven P.M. I am not informed as to the quantity of the drug the patient took. At 8.45 I was telephoned by the patient's sister, Miss M. L., who urgently requested my services, stating, at the same time, she believed her brother was dying, and she thought it was from overdoses of morphia. Aware of the fact that death in opium narcosis chiefly occurs through failure in the respiratory function and the circulation, I thought at once of atropia, it being, in my estimation, the most reliable, and perhaps the only agent which exerts a decidedly stimulating effect upon the respiratory centres and cardiac inhibitory centres, and providing myself with a hypodermic syringe and a solution of atropia, I hastened to the bedside of the patient. I was with him within seven minutes of the call.

On scrutinizing his condition, and raising his eyelids, I perceived his pupils to be contracted to the size of a small pin's head, and totally insensible. Coma profound, deglutition entirely suspended; countenance deeply cyanosed; eyes closed; respirations three per minute and stertorous; pulse small, feeble and irregular. The muscles of the limbs and trunk were in a state of relaxation. I immediately administered a hypodermic injection of $\frac{1}{75}$ gr. atropia, with a view of stimulating the cerebro-spinal axis, and thereby exciting the action upon the vaso-motor nerves; moreover, to strengthen cardiac contractions, and thereby increase arterial pressure, which in opium narcosis is very much diminished, through paralysis of the vagus. While waiting twenty minutes, I applied, in the meantime, sinapisms to the præcordial region, with a view of stimulating the excito-motor ganglionic cells of the heart, and to the calves, with a view of stimulating the peripheral vaso-motor nerves. At the end of this time I gave another hypodermic injection of $\frac{1}{48}$ gr. of atropia. At this moment the family physician arrived; the patient's respiration being then four per minute and the cyanosed condition somewhat abated.

I stated to the Doctor that, in my opinion, the best treatment would be the continuance of the atropia, with the addition of caffein and the electric battery; to which he replied, "well, if that is the best thing to do, let us keep on." Upon this I hurried to my office, quite near, to procure my battery and the solution of caffein. During my absence, and while preparing the battery for action, the doctor administered to patient two injections, one of $\frac{1}{48}$ gr. atropia and one of 2 grs. caffein. When ready, I applied one electrode to the neck, while the other I moved along the margins of the ribs, so as to influence the diaphragm, and perhaps the ganglionic nerves. Inquiring if the patient had false teeth, I at the same time pressed down the chin, to examine, and found that the tongue had fallen back into the pharynx, from relaxation of its muscles, due to narcotism. I immediately grasped the organ and drew it forward, holding it in its new position; at once the stertor ceased, the breathing became less laborious and more natural, the respirations being then about 4½ per minute. The hypodermic injections were continued until about 11 o'clock; the tongue being kept forward; the respirations increasing at the rate of about one per hour, and being at this time about six per minute.

At this time the physician, in the presence of the patient's family and friends, exclaimed, "Dr. Praeger, I don't think this is a case of morphia poisoning." Why, Doctor, what else could it be? To which he replied, "Well, well, I don't think it is a case of morphia poisoning." I then said, Doctor, it surely is not cerebral apoplexy, for, as you see, there is no throbbing of the carotids, the pupils are contracted and the eyelids closed; nor is it asphyxia, as you see there is no swelling of the veins of the head and neck, eyes are not bloodshot, nor do they protrude from their sockets; nor is it uræmia. "Well, I could not say, but I don't think it is morphia poisoning." Under this condition of disagreement, the family thought it necessary to call in a third physician; a telegraphic

message was sent to Dr. S. W. Gross, narrating the facts of the case; an answer was received stating that the atropia treatment, etc., was correct. Nevertheless, a second telegram was sent, requesting his immediate presence. An express train was at once ordered, at Ninth and Green streets, Philadelphia, and by 1.30 A.M. Dr. Gross was at the patient's bedside. While viewing the case, several members of the family anxiously asked his opinion, to which he said, "It is a case of morphia poisoning." He then turned to me and asked what treatment I had pursued. I told him. He then said to all that were present, "All that can be done has been done." On seeing the gradual amelioration of his general condition continue, nothing more was suggested nor done, except as regards the tongue of the patient, which it was still found necessary to hold out, and which was held until about 9 o'clock A.M. I kept at the patient's bedside and closely watched for any untoward symptoms. At about 7 o'clock A.M. his respirations were 12 per minute; at this time I made a vigorous effort to rouse him. I shook and pinched him, and shouted loudly in his ears, at which he slightly raised his eyelids, and again relapsed into an apparent state of coma. At the end of half an hour or so I made another attempt to rouse him, but without avail; half an hour later he opened his eyes and made an effort to speak. I persisted in my attempts to keep him awake, and by continually shaking him, and hallooing loudly into his ear, he finally raised himself up in bed. His cerebral symptoms gradually subsided from this moment. There was now headache, nausea, and vomiting; his tongue was necessarily much swollen, tender, and painful, undoubtedly due to the constant pressure and irritation caused by the holding of it with the fingers, and presented features not unlike that of glossitis; these conditions lasted several days, during which time, at the request of the family, I continued my visits.

Hospital Reports.

WESTERN PENNSYLVANIA HOSPITAL, PITTSBURGH, PA.

SERVICE OF J. B. MURDOCH, M.D.

Reported by JOHN J. BUCHANAN, M.D., Resident.

Sarcoma of Lower Jaw; Removal; Recovery, with Recurrence.

Mary H., widow, aged 35, was admitted to the house, January 5th, 1882, with an enormous enlargement of the left side of the lower jaw. She stated that the trouble had commenced six months before, by a swelling the size of a pea on the alveolar border of the lower jaw. This she attributed to irritation by a broken molar tooth in the upper jaw. Since that time the swelling had progressively increased. At the time of her admission the growth extended from a line connecting the outer canthus of the left eye with the same mastoid process above to a line on a level with the larynx below. From side to side the mass extended from the right corner of the mouth to the left mastoid process. The left eyelid was very œdematous and the eye closed. From the wing of the nose on the right side to the middle of the body of the jaw was two and three-fourths inches. Between the same points on the left side was six and a half inches. The skin near the point of the chin was red, tense and evidently infiltrated. The growth moved with the jaw and involved it from the canine tooth on the right side to the articulation on the left. The great vessels of the neck appeared to be merely pushed backward. The floor of the mouth was extensively infiltrated, but the tongue had escaped, being pushed far back and to the right. The woman had the cancerous cachexia, complained of sleeplessness and constant pain.

Operation.—On January 12th the patient was anæsthetized, and the tumor removed by Dr. J. B. Murdoch, assisted by members of the staff and the residents. An incision was made from a point in front of the tragus, along the position of the body of the jaw, to a point one-third of the distance from the symphysis to the angle on the right side. An incision was then made to include the affected integument. A third incision was made through the median line of the lower lip. The facial artery on the right side was secured and twisted at each extremity. On the left side it was wanting, having been absorbed from pressure. A number of other vessels required torsion. The integument was then reflected upward and downward from the original incision. The body of the jaw was divided with the saw at the position of the canine tooth on the right side. Traction of the mass toward the left put the tissues at the root of the tongue on the stretch. These were divided, separating the tongue from the diseased parts. The tip of the tongue was then transfixed by a stout wire, and the organ drawn forward by it. Strong traction of the jaw toward the left was continued, the dissection carried on from within and the jaw disarticulated. All of the jaw to the left of the right canine tooth was then removed, bringing with it the diseased mass. During the operation there was comparatively little arterial hemorrhage. There was considerable venous bleeding from the large cavity left by the removal of the tumor. This was checked by the actual cautery and persulphate of iron. The cavity was filled with absorbent cotton, and the edges of the flaps united with silver wire and hare-lip pins. The incision was sealed with compound tincture of benzoin.

The weight of the growth was twenty-one ounces. Microscopical examination showed it to be a sarcoma, of the round-cell variety.

In the evening of the day of operation her pulse was very weak and beat 144 to the minute. Her tongue was so well under control as to warrant the removal of the wire. She swallowed, with considerable difficulty, a sufficient quantity of beef essence and milk, which was conveyed to

the pharynx through a soft rubber tube. The œdema had entirely disappeared from the eyelid. Morphia, in one sixth grain doses, was given hypodermically. During the first two days the only inconvenience was from accumulation of saliva in the throat, which was frequently removed with sponge probangs. The cavity was frequently disinfected by syringing with a four-grain solution of potassium permanganate. Feeding was diligently attended to. At the end of the second day the dressings were removed. At the end of the third day the skin flaps were found united, except at one point used for drainage. The cotton was then removed from the cavity inside the mouth. There had been no hemorrhage whatever since the operation. Her pulse came down to 120 per minute. Her maximum temperature was 100.2°.

On the eighth day she had swelling of the tongue, which disappeared in thirty-six hours. On the thirteenth day she developed a sharp attack of facial erysipelas which lasted a week. At the end of the third week she was able to go about the ward, she had gained flesh, her health was much better than before the operation, and she was almost free from pain. The growth, however, was evidently returning, the hollow of the cheek having almost filled up. One month from the time of operation the tumor was growing rapidly, the integument being tense and infiltrated. She was removed from the hospital on February 13th, further operation being thought unadvisable.

Medical Societies.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated meeting, April 6th, 1882. The President, Edward L. Duer, M.D., in the Chair.

Removal of the Uterus for Fibroid Tumor; Death; Autopsy.

Dr. E. E. Montgomery reported the following case, which had been under his care at the Philadelphia Hospital.

Sarah B. (colored), age 46, widow, native of New Jersey, of temperate habits, has been an inmate of the Philadelphia Hospital for nearly three years. She entered the gynecological ward about the last of February, soliciting the removal of a large abdominal tumor.

The establishment of her menstrual function was attended by severe hemorrhages, but soon became regular. The menses ceased at one time for five years. She has not menstruated for two years. She was never pregnant.

The growth of the tumor, which began eighteen years ago, she attributed to a kick in the abdomen from her husband. The tumor soon acquired great size, filling up the abdomen and pressing against the diaphragm, causing great distress. She has been treated by means of hypodermic injections of ergotine, and later by the earth treatment. The latter was followed by a slight reduction, possibly due to the rest in bed. When she came under my care the abdomen was more prominent than if at full term of pregnancy. Owing to the woman's emaciation and the loss of muscular power in the walls of the abdomen the mass had settled down into the lower part of the cavity, encroaching but little upon the portion above the umbilicus. A fluctuating surface, evidently the bladder, covers the whole of the lower face of the mass. The tumor was regular in outline and about equal in size on either side the median line. At the upper part of the right side could be felt a smaller, loosely connected mass, between which and the tumor the percussion was resonant. The abdominal walls were freely movable over the tumor, but the latter could be raised or moved from side to side only to a limited extent. Examination per vaginam disclosed the whole uterus involved in the mass, which rested upon the pelvis. The sound could be passed five inches into the uterine canal along the posterior border of the tumor. The posterior lip was thin.

We evidently had a fibroid tumor which had originated in the anterior wall of the uterus and had drawn the bladder up with it as it grew.

In view of the large size of the mass, the anxiety of the patient for its removal, and her general condition, it was decided, after a staff consultation, to make an exploratory incision, and if the adhesions were not extensive above and posteriorly, proceed to the complete removal of the tumor and uterus.

The patient was kept quiet in bed one week, and sulphate of quinia, three grains, tincture of the chloride of iron, thirty drops, were given three times a day. The bowels were regulated by the use of compound liquorice powder. The urine, examined by one of the resident physicians, was found alkaline and contained no albumen.

Operation.—March 17th. Assisted by my colleagues, Drs. Duer, Warder, Parish, Musser and Hatfield, I proceeded to perform the operation under antiseptic precautions, using thymol spray. An incision three inches long was first made down to the tumor and the hand introduced. No adhesions were found above and but one band posteriorly. The bladder was spread out over and closely adherent to the tumor anteriorly. The opening was now extended to the symphysis below and the umbilicus above, and the tumor with some difficulty lifted through. The peritoneal covering of the tumor was burned through with Paquelin's thermo-cautery and the bladder dissected off. The capsule was then raised on either side, permitting ligatures to be passed beneath the broad ligaments. The lower portion of the cervix was then tied in two sections, both surrounded by ligatures, and the mass removed. Although the hemorrhage had not been excessive the condition of our patient now became critical. The pulse was very feeble, indeed, scarcely perceptible; respiration infrequent and sighing. It was only through the persistent care of Dr. Parish in the use of hypodermics of whisky and ammonia and hot water applications over the chest that she survived until the wound could be closed. She was placed in bed and surrounded by hot bottles, ergot and digitalis were given hypodermically, and whisky by the mouth and rectum, but without counteracting the effects of shock. She died two and a half hours after the operation.

At the autopsy a couple of ounces of bloody serum were found in Douglas' cul-de sac. The kidneys were small, soft, flabby, and upon being opened were found dilated into sacs, the structure of them being largely destroyed. One was full of pus. The ureters were greatly dilated. They were not injured in the dissection for the removal of the mass. The heart was contracted, pale, and empty of blood. The ligatures had been applied around the cervix, one and a half inches above the os.

The tumor was a solid mass, weighing sixteen pounds; its longest diameter, laterally, quite regular in outline, presenting from the right upper surface a smaller mass with an elongated pedicle.

Aside from the necessity of placing such cases upon record to obtain correct statistics, it is of special importance as an illustration of the advantage to be derived from a careful study of the condition of the renal organs previous to the operation, and the increased gravity given by any symptoms that would cause us to suspect a renal lesion. We made no microscopical examination of the urine, so the presence of pus escaped notice, though its presence should have been suspected from the alkalinity of the urine.

Dr. B. F. Baer considered the examination of the urine a very important point, as albuminous or purulent urine is always a sign of danger.

Dr. H. Beates remarked, that in testing for albumen in urine by means of Hellen's test, he had noticed a singular fact in some instances where the urine was alkaline or but very faintly acid. If the acid was added to the urine before boiling no precipitation occurred, but by reversing the test, boiling first and adding the acid afterward, the presence of albumen was shown.

Dr. Montgomery, in closing the discussion, remarked that, although at the autopsy one kidney was found full of pus, none had ever been observed in the urine. This was, perhaps, due to occlusion of the ureter from pressure by the tumor. If pus were present in small quantity it might be considered to arise from cystitis from pressure on the bladder. But if urine is repeatedly found to be alkaline when no alkalies have been administered, it would indicate the presence of pus although none were found.

Editorial Department.

Periscope.

Occlusion of the Canal of the Os Uteri.

In the *North Carolina Medical Journal*, Dr. T. B. Wilkerson reports the following case:—

Mrs. E. L., married, aged 34, the mother of two children, of a nervous temperament, with a hereditary tubercular diathesis, consulted me in regard to a uterine deformity. She suffered from all the nervous phantasia that the female system is heir to, dating the beginning of her troubles from the birth of her last child, six years ago, at which time there was a rupture of the left side of the external os uteri. Shortly after her labor the following symptoms commenced, and from that time to the date of operation, scarcely an hour out of the twenty-four, during each day, has she been free from pain. These paroxysmal attacks were liable to take place at any moment, beginning with a premonitory darting pain in the lower portion of the pelvic region, extending to and along the middle of the sacral region. There was also a slight hacking cough, intense dyspnœa, with a troublesome smothering sensation, as if a heavy weight was resting on the thorax; excruciating pain in the præcordial region, nausea and headache. These phenomena were greatly increased at the commencement of each menstrual period, attended with severe bearing-down pains at the bottom of the abdominal cavity, closely imitating the throes of labor; and notwithstanding these strong expulsive efforts, hardly a stain of the monthly flow could be discerned.

The patient was placed in Dr. Sims' position, and with his speculum introduced, a good view of the parts was given. The cervix presented an appearance as if it had been cleanly excised, leaving no lips, and the cervical canal was thoroughly occluded. On the outer left side, about one-quarter of an inch above the marginal edge of the cervix uteri, was a very minute fistulous opening that, with care, a small sound, the size of an ordinary pocket probe, could be made to enter for one and a quarter inches; beyond this point the instrument could not be made to pass. The uterus and vagina were exceedingly sensitive. It was decided to operate. Accordingly, a duckbill speculum was introduced; a long tenaculum was engaged in the upper anterior surface of the neck; a small grooved director was then passed into the fistulous track on the left side, until its point was arrested on the opposite surface. A narrow, conical-shaped knife was then passed along the groove of the director to its terminal point. The knife and guide were then carried to the right, a little beyond the central point of the neck, the knife dividing, in its passage, the intervening tissue of the cervix, in a transverse median line. While the knife was held stationary, the director was carried onward to the fundus. This was done in order to be certain that the incision corresponded with the normal canal. The director being then slightly withdrawn, the knife and guide were passed up until the cavity of the womb was reached, slightly nicking the constricted canal. These instruments being withdrawn, and their positions reversed, the left side was treated in a similar manner. This left a straight, cone-shaped canal leading to the uterine cavity. After arresting hemorrhages, an intra-uterine stem,

two inches in length, and about the diameter of a large gum male catheter, was inserted in the canal—the stem being held in position by one of Fowler's pessaries, with a piece of black silk cemented on the under surface of the cut, these instruments being first coated with carbolized glycerine. The patient was confined to bed for ten days. The stem was allowed to remain in for six days, and a large-sized gum catheter was passed every third day afterwards, until the time of the next monthly period. Internally, immediately after the operation, she was given, thrice daily, the following pill:—

℞.	Acid. carbol.,	gtt. xij
	Pulv. opii,	gr. vij
	Quiniæ sulph.,	gr. xij. M.

Ft. pil. No. xii.

The vagina was thoroughly washed out, twice a day, with carbolized lead and opium water. No inflammatory symptoms supervened, while the previous nervous phenomena disappeared. The new outlet remained patulous, without any contraction in its calibre.

In such cases, thorough quietude of the body in a recumbent position, and the fixing of the womb, by means of a properly adjusted cup-pessary, so as to prevent any to and fro movement of the intra-uterine stem against the side of the wounded canal, add much to the chances of a favorable result; for upon the proper maintenance in situ of this intra-uterine instrument depends the future hope of a patulous condition of the organ.

— —

Transfusion.

The *Medical Press and Circular* thus discourses about transfusion:—

Transfusion is to-day by no means a rare operation, and medical men have fully recognized the legitimacy of expecting favorable results from it when practiced under favorable conditions. Those conditions consist in keeping the blood to be injected from coagulating, from cooling, and from the contact of air and the substances it contains. Of all the procedures invented to attain these ends, that of Dr. Roussel (Geneva) merits the preference, in that it has, in his hands, fulfilled all the requirements necessary to the success of the operation. Dr. Roussel, a few days ago, in Paris, performed transfusion. A woman, aged thirty-five, had already five children and two miscarriages. In December last she was six months pregnant, and suffered a great deal. The abdomen was enormous, and she distinctly felt the movements of the child. Two medical men who examined her, believing that they were in presence of an ovarian cyst, sent the woman to Dr. Peau, the celebrated ovariotomist. M. Peau recognized at once pregnancy, and as labor had prematurely set in, the woman, refusing to stay in the hospital, was transferred to the house of a midwife, who immediately broke the membranes, giving issue to nearly 20 quarts of amniotic fluid. Twins were successively and easily delivered; one of them lived a couple of hours. The loss of blood was no more than usual, and all appeared to go on well.

On the 1st of January, the eighth day after the delivery, the woman was seized with flooding, which was apparently arrested by plugging, but, as was afterwards proved, the hemorrhage still went on in the cavity of the uterus. Ten days afterward another attack of hemorrhage occurred, but more serious than the first, and was followed by syncope, convulsive movements, etc. Ergotine and cold aspersions with the horizontal posture mastered it, but the patient was blanched, cold, and affected with cough, accompanied by continued fever. The pulse was 130–140; vomiting, frequent diarrhœa, and complete loss of appetite were the other symptoms observed. The patient was attended by four medical men, including M. Peau, who believed that some uterine fibroma was the cause of the hemorrhage.

On the 31st of January, becoming worse and worse, the woman desired to be brought to her own home. Bismuth, morphine, iron, pepsine inhalations of oxygen, etc., were ordered. The patient, although no new attack of hemorrhage occurred, became weaker and weaker, the vomiting was frequent, and the diarrhœa came on every hour. The fainting was produced every time she attempted to sit up, the cough became more frequent, and the respiration was insufficient. Death was evidently at hand.

At this stage transfusion (direct) was recommended, as a last resource. Dr. Roussel was sent for, and on his arrival found the patient in the following condition: Barely conscious, cold, pale as a corpse, veins invisible, pulse 140, and thready. The heart and lungs were healthy. On the 7th of February, and at five in the evening, the patient being in the position above described, with exception of the pulse, which was now 150, the operation was performed. The sister and the husband of the woman offered their arms, but Dr. Roussel, on inspection, refused the offer, and on inquiring if there was not some large workshop in the neighborhood, hastened to one indicated, and having explained to the workmen the nature of his visit, several came forward ready to give their blood. A young man, small and robust, was chosen. Arriving at the bedside, the transfusor was washed in warm water to which a little soda was added. The thorax of the patient was uncovered, and the left arm was lying straight down by her side. After having mapped out with ink the course of the artery at the bend of the elbow of the young man, the transfusor was applied over the median vein, the same vessel was opened in the arm of the patient, and the canula of the instrument inserted as soon as all the air was expelled from the transfusor. This was affected by plunging the bell of the instrument in warm water, which, by means of the ball pump, was sucked up so as to completely fill the tube, expelling all the air. The two subjects were now united by an uninterrupted canal, through which the blood was allowed to flow gently. After four ounces were injected, the patient drew a long breath, and on being questioned said that she felt a sensation of warmth going up from the arm to the chest. As soon as six ounces were transfused the operation was arrested, as a slight convulsive movement was observed in the patient. The wound in the arm of the man was dressed and he returned to his work.

As to the patient, color was observed in her hitherto blanched cheeks, her lips were red, and her eyes brilliant. She spoke with strength and vivacity. She felt herself strong and well. Dr. Roussel having warned her that a shivering generally came on (due to the reëstablishing of the equilibrium of the vasomotor system) a short time after the operation, which would be followed by profuse sweating and refreshing sleep, hot tea and rum were held in readiness. In half an hour the shivering came on; the skin, which had been warm, became cold; the pulse, which stood at 100 after the transfusion, now went up to 140. Hot drinks were given in abundance, and after twenty-five minutes the body became more warm, and soon perspiration was abundant. As night came on the patient slept a broken sleep, yet the following morning she felt comparatively well, and during the day was able to partake of nourishment six times, and receive visits. The *bien être* continued, and on the 12th of February, or five days after the operation, the woman got up for an hour or two, and to-day, the 25th of February, the convalescence is complete.

Dr. Roussel, who has already practiced 128 transfusions, comes to the following conclusions: 1. Injection into the veins of a liquid other than blood is followed rarely with good results; 2. Transfusion of the blood of an animal of a different kind is always hurtful; 3. Transfusion of the blood of the same kind by the indirect method is very often unsuccessful; 4. Transfusion to succeed must be direct.

Division of the Neck of the Femur.

At a recent meeting of the Surgical Society of Ireland (*Medical Press and Circular*), Mr. W. Stokes presented the following case: A boy aged 14 was admitted into the hospital, March 1, 1881. He was fairly well nourished. The right thigh and leg were, however, much atrophied, and this process involved largely not only the soft structure of the limb, but also the bones, arrest of development of the tibia on the affected side, as well as the femur, being well marked. The thigh was strongly flexed, and rigidly fixed in that position, which rendered the limb perfectly useless. The affected limb was three and one-eighth inches shorter than its fellow. On the lateral and posterior portions of the upper part of the thigh were numerous cicatrices of old sinuses that had discharged very offensive pus for several years. The disease commenced nine years before, as the result of an injury. During this time he had been treated with blisters and extension, and on one occasion excision of the head of the bone was proposed, but his mother would not consent to it. It was decided to divide the neck of the femur, and the operation was performed as follows: The patient being etherized, a straight incision was made behind the great trochanter, commencing three-quarters of an inch above it, and carried downward for a distance of three inches and a half. From the upper portion of the incision it was carried in a curved direction, upward, forward, and then slightly downward, the whole incision being thus somewhat crozier-shaped. This line of incision was adopted partly to give plenty of space to determine the actual condition of the parts, and partly because it is a convenient one to adopt, in case it is deemed desirable to excise the head of the bone. The soft structures being then dissected off the trochanter and portion of the bone immediately below it, by scalpel and periosteal raspatory, the finger was passed into the wound, to ascertain the condition of the head and neck of the bone. The former was found to be rigidly fixed to the acetabulum, the latter shortened and atrophied. There was no evidence whatever of any softening of any part of the bone. A medium-sized osteotome was then passed in, and by a few sharp taps of a mallet the neck of the femur was divided. Notwithstanding this, it was impossible to satisfactorily straighten the limb, owing to muscular contraction, chiefly of the adductors. A subcutaneous tenotomy at once overcame this obstruction and the limb could then be extended. The wound was carefully washed out with a 1–40 solution of carbolic acid, a drainage tube inserted, and the edges brought into close apposition with numerous points of interrupted catgut suture. The usual Lister dressings were then applied. The wound healed without pus production. During convalescence a moderate extension of the limb was kept up, mainly by the double-threaded screw extension splint. After six weeks the patient was able to get about the ward without crutches, by the aid of a stick. This latter was subsequently discarded and the patient soon after returned home. Three months after the patient was healthy and strong, and able to walk with facility, without stick or crutch. He suffered no pain, and there was distinct evidence of the formation of a false joint at the site of the operation. The muscular development of the affected limb was greatly improved, the limb straight, and the patient stated that he was able to walk, without inconvenience, a distance of over three miles. The credit of having first suggested and practiced this operation for the cure of this deformity, formerly considered a condition that necessitated amputation, is due to Dr. J. Rhea Barton, who performed the operation in 1826, in the case of a sailor, by exposing the trochanter by means of a crucial incision and dividing it with a saw. In the opinion of the operator, a false joint is much more likely to follow division with a chisel, than a saw, because, when the latter is used fragments of bone may be left in the wound, which, acting as centres of ossification, may possibly be antagonistic to the formation of a pseudo-arthrosis.

Paralysis of the Uterus.

In the Peoria *Medical Monthly*, Dr. Romaine J. Curtis relates the following cases:—

Case 1.—Mrs. ——, a multipara, aged 37, was taken in labor, and two hours after sent for me. When I arrived something had suspended the rhythm of parturition, which I could not discover. The os was partially dilated and dilatable. Child alive, with vertex presentation. Patient stated she was always delivered by forceps, because of cessation of labor pains, and I was requested to deliver in this manner. I advised her to wait.

The next day I found the pains strong, but to my surprise they soon stopped abruptly, the os being fully dilated and the bag of waters protruding. I again left her, and she passed a comfortable twenty four hours, when labor was again established. I visited her, taking an electro-magnetic machine. As I expected, pains again ceased when the head was in the pelvis. The patient clamored for ether and forceps, the propriety of which I could not deny, and in great anger the friends sent for another physician. I had forceps with me, but I wanted the patient to go through her labor. I applied the electricity, one pole on each side of the uterus, and half way between the pubes and umbilicus. The uterus responded instantly, and I could bring on contraction at will, and continue it as long as I kept the poles applied. To test the case further I gave ether and continued to conduct the labor, which was soon completed. My friend Dr.——, arrived too late to witness the birth.

Case 2.—I was sent for at night to attend Mrs. ——, multipara, aged 38 years. Labor progressed normally and rapidly for two hours. The os was well dilated, bag of waters protruding, when pains abruptly stopped, without discoverable cause. After using friction to uterus through abdominal walls, and giving ergot, I ruptured the membranes, and waited two hours without a sign of labor being resumed. Counsel was now called, who used friction to uterus, body and cervix, for some time; gave gr. x quinine, more ergot, some whisky, and then, as labor was not resumed, advised waiting, and went home. Thinking the case over I sent for the machine and applied as before. The current was rather strong, as all hands were in ill temper. The patient screamed with pain, a contraction of the uterus followed, and labor was completed with one pain.

Case 3.—Mrs. ——, aged about 26 years, a multipara, was delivered after six hours' labor. I removed the placenta by Crede's method, applied a "binder" after contracting the uterus, and left her. In two hours was sent for in great haste, and found the patient with concealed hemorrhage. I removed clots and secured contraction of uterus, but found that I was obliged to maintain pressure to maintain contraction, and that the bleeding was continuing. Two hours were spent giving ergot, carbonate of ammonia, and compressing the uterus, before I thought of electricity, and another hour before the machine could be obtained and made to "work," and all this time the patient was losing blood. The use of the induced current set matters right.

Osseous Degeneration of the Eye.

Dr. Martin F. Coomes reports the following case in the *Medical Herald:* Miss M. L. O., age 32 years, consulted me in the latter part of July, 1881. She complained of constant and severe pain in the left eye, and along the course of the supra-orbital branch of the fifth nerve. The pain was constant, but worse during the day than at night, and nothing but opiates, internally, seemed to possess the power of alleviating it. Vision, in the diseased eye, was completely destroyed by an inflammation, during her early childhood. She said the eye had been painful, at times, for three years preceding this last attack, which occurred in the spring of 1881. The right eye was weak and irritable; vision equaled $\frac{20}{40}$. In the left eye T n + 3, while in the right T n + was observed. There was complete occlusion of the pupil of the left eye, with a pink zone encircling the cornea, such as is met with in cases of irido cyclitis.

Not being able to make an ophthalmoscopic examination, and taking into consideration the great tension and persistent pain, and knowing that the majority of such cases of irido-cyclitis, and, in fact, most all of the chronic inflammations of the uveal tract, are relieved by iridectomy, that operation was performed July 20, 1881. The iris was extremely rotten, and it was with great difficulty that I succeeded in removing a portion of it. The operation relieved the unpleasant symptoms for three or four weeks, but the pains and tension gradually returned with as much severity as before.

On the eleventh of November, 1881, the patient was chloroformed and the eye enucleated. During the operation it was ascertained that the posterior portion of the globe presented to the finger a sensation of the hardness of stone, while the anterior portion was elastic, and presented nothing unusual. The patient made a good recovery, and is now free from pain, and the irritation in the fellow eye has entirely subsided.

Upon investigation, the sclera of the enucleated eye was apparently normal in structure, with adhesions to the conjunctiva. The cornea was perfectly healthy in appearance; the choroid was entirely absent. From the equator forward to the ciliary body, at some points, the connective-tissue remains of the choroid was in a tolerable state of preservation. The ciliary processes were, apparently, all present, but firmly adherent to the mass which represented the hyaloid and vitreous body. The lens was shrunken, and its periphery encircled by a thin sheet of osseous tissue, corresponding to the capsular ligament.

The hyaloid membrane and choroid seemed transformed into a bony shell, having a round posterior opening about the twentieth of an inch in diameter, corresponding to the porus opticus, as was easily determined by the presence of the central vessels of the retina, surrounded by a few nerve fibres. This opening was surrounded by apparently healthy, compact bone, extending forward nearly to the equator of the globe. The remainder of it, from this point forward, in some portions, was interspersed with chalky deposit, and in many places the osseous structure was entirely absent. Near the equatorial line it became very thin. The interior of the shell was funnel-shaped. Some portions of the inner surface were very hard, others were of the nature of thin cartilage, and others were apparently composed of threads of osseous tissue, presenting the appearance of the pith of certain medullated plants.

Puncture of the Ears

Wm. Allan thus writes to the Dublin *Journal of Medical Science.* The following interesting case came under my care in January, 1882: B.

Bahoo, aged sixteen years, presented himself for admission into the Victoria Hospital, in order that he might receive surgical treatment for two large auricular growths. Through an interpreter the following history was obtained. He had his ears pierced for earrings when eight years of age. Shortly after the operation the tumors appeared, and when examined had attained the following proportions. The right tumor, attached to the lobules of the ear, and having cutaneous attachments to the parotid and mastoid regions, meas-

ured from above downward nine inches, and in circumference fourteen inches; lobulated, hard and firm to the feel. The left tumor, smaller than the right, and having a somewhat similar attachment, measured from above downward 9 inches, and ten inches in circumference. A small portion of the posterior inferior part of this tumor exhibited leucoderma, while the anterior inferior end of the right tumor showed signs of commencing degeneration. After placing him for a few days on preparatory treatment, I ligatured the base of the right tumor with some little difficulty; the first ligature, though strong, giving way. The nutritive supply of the tumor having been interfered with, I dissected it off from its attachments, removing a portion of the ear and surrounding tissue, to prevent, if possible, a recurrence of the growth; weight on removal, two pounds twelve ounces. I repeated the same operation with the left tumor, but passed a double ligature through the centre of the pedicle, on account of its size, tying it anteriorly and posteriorly; weight on removal, one pound twelve ounces. There was a fair amount of arterial hemorrhage, on account of the arteries supplying the tumors being unable to contract; pressure on the common carotid and torsion were of service. The after treatment consisted of rest and a pill containing opium and quinine. The parts were washed daily with carbolic acid lotion and afterwards dressed with zinc ointment. No glandular enlargement existed at any time. The growths are probably of a fibro-plastic nature.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——We have received the Thirty-ninth Annual Report of the Mount Hope Retreat, for the year 1881. The institution, we are glad to see, is satisfactorily conducted.

——Is the Ovarian Cell Pathognomonic? By William A. Edwards, M.D. A very valuable reprint from the *American Journal of Medical Sciences* for April, 1882.

——The Century and the School. A lecture read before the National Educational Association, at Atlanta, Ga. By F. Louis Soldan, Principal of Normal School, St. Louis, Mo.

——Abdominal Section in the Treatment of Ulceration and Perforation of the Cæcum and the Appendix Vermiformis. By William A. Byrd, M.D., Illinois. Reprinted from the Transactions of the American Medical Association.

——Anæsthesia and Non-anæsthesia in the Extraction of Cataract; with some practical suggestions regarding the performance of this operation, and comparative statistics of two hundred cases. By Hasket Derby, M.D. A very interesting little pamphlet.

——The Case of Guiteau; a psychological study, by George M. Beard, M.D., of New York, comes to us as a reprint from the *Journal of Nervous and Mental Diseases*, January, 1882. In this essay he maintains that "Guiteau was taken insane at the age of eighteen years, while attending school at Ann Arbor, and has been insane ever since." "The special type of his insanity is what is commonly and correctly called religious monomania."

——Lumbo-Colotomy in the New-born, for Relief of Imperforate Rectum. By William A. Byrd, M.D., of Quincy, Ill. This comes to us in the form of a reprint from the *St. Louis Courier of Medicine*, December, 1881. The author, quoting from Van Buren, says: "Perhaps the best answer to those who object to an inguinal anus, on sentimental grounds, and the best proof of its practical efficacy, is to be found in the case of the lady, related by Mr. Curling, who had been subjected to the operation in 1816, and who, at the age of forty-three, enjoys the best health, goes into society and attends balls, and no one would suspect her to be the subject of any infirmity. She is married, has borne four children, and her pregnancies and labors have been quite normal. She never experiences any pain in the part."

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	**$5.00**
Half-Yearly Compendium of Med. Science,	**2.50**
Reporter and Compendium, - - -	**7.00**
Physician's Daily Pocket Record, - -	**1.50**
Reporter and Pocket Record, - - -	**6.25**
Reporter, Comp. and Pocket Record, - -	**8.25**

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

RAILROAD SURGEONS.

We have had something to say about Steamship Surgeons; now a few words about Railroad Surgeons. There was recently held at Decatur, Illinois, a meeting of the Surgeons of the Eastern Division, W. St. L. and P. R'y.

Two papers were read by J. T. WOODS, M.D., Chief Surgeon. In the first, he sketched the origin and history of the organization. It seems that when, in April, 1875, he suggested the question of surgical service on the Wabash, to its President, the outlook was very gloomy. It was deemed impracticable, because it was believed that it would lead to abuses. It would cause the employés to expect too much from their employers. Finally, Dr. WOODS received consent to try the experiment. The first point was to find a good and reliable surgeon, in each of certain selected localities, who would serve the Company on such conditions that, as a whole, advantage would accrue to the employers, the employé and the medical man himself. At first, much difficulty was experienced. Opposition was experienced from the employés themselves, who often preferred to choose their own surgeon, in lieu of the one selected. This natural and pardonable timidity of employés has gradually melted away, as they have not been slow to note that men who are expecting and hold themselves prepared for this special duty are none the less careful, and are, because of their assumed responsibility, more ready with appliances, in greater perfection, than those who are otherwise wholly engaged. They have also learned that each, in his locality, stands among the very first in his calling. In the same direction, and of vital importance alike to the employer, the patient and surgeon, lies the fact that familiarity with this species of work leads to fewer unsatisfactory results than would be otherwise expected. Those who have had much experience in railway surgery are aware that these cases, as a class, are peculiar, and, to attain the best results, especial attention, coupled with practice among them, is of inestimable value. These, among many others, are the advantages brought to the service of injured employés, as well as to the company, by their medical officers. We know not whether the great Pennsylvania system has any regularly organized medical department or not, for Dr. WOODS says, "On numerous lines, more or less system has been attempted, but the work was so desultory and unsatisfactory, and, finally, so expensive, that it usually has either gradually dropped to pieces or been suddenly abandoned, as is the case on the whole system controlled by Mr. VANDERBILT, in which the company now take no care of any one, and the medical man who serves the injured must look to the patient for pay—the maimed men, who have not the means, however well disposed."

It is a well established fact that employés are always more attached and more faithful to an employer whom they feel has their interests at heart and will take care of them. Instinct will teach them enough for this. Again, there is always a large army of thoroughly capable young physicians who, because merely of their youth, are unable to secure any private practice. They are just as competent to cure disease and relieve

the maimed as are many of their older confrères, but men and women are unwilling to trust their lives and health in the hands of *young men.* These physicians would be very glad to accept positions in the service of railroad companies for a very moderate compensation. Thus also would the corporation secure efficient medical service at a comparatively small expense. The question really, as Dr. Woods says, is one of business. If by providing free medical attendance for their injured and sick employés, the company can feel sure that by thus caring for their interests they will derive more benefit from their labors, then can it be confidently trusted that such organizations will become general; if not, then they will be unknown, since it would be altogether too Utopian to expect corporations to be so eminently philanthropic.

CHARITY ORGANIZATIONS.

For years the streets of our large cities have been encumbered by beggars of all kinds. From the aged and decrepid blind man, with his pitiful story of a wife and six young children at home, down to the ragged urchin sent out to beg (and to become thereby inured to a life of shiftless laziness) by his worthless and generally drunken parents, all ages and sexes are to be found represented in this vast army of worthless human nature. We have now cause to rejoice that the real nuisance has been recognized at last, and that energetic measures have been inaugurated which will result in making this objectionable feature of city life a thing of the past. The physician has much interest in this evil and its proposed remedy; for one prominent reason, let us remind him of the influence for evil that may lie in the impression upon a pregnant woman of some of the truly horrible and repulsive spectacles presented by these professional beggars. The stock in trade, the capital, of these poor deformed specimens of humanity lies in their very deformities, which they make as prominent and conspicuous as possible, asking all the while for alms, and using their misfortunes to enforce their appeals. Who can say that the large majority of monstrosities are not the direct results of impressions received from these deformed beggars?

A committee of the Society for Organizing Charity, composed of our most prominent citizens, recently called upon the Mayor of Philadelphia, to solicit his assistance in the furtherance of their work.

It was then stated that the Society had extended its organization over the whole city. Every district has a superintendent, who keeps an office open at fixed hours, and who is charged with the duty of investigating the case of every applicant, and giving relief in pressing emergencies, or referring the case to the proper institution or family. They will furnish to the police department, for the use of each officer, a card with a list of the district offices of the charity organization, their location and superintendents; also a supply of tickets to be used in directing beggars to the office of the proper district. Without using harshness, the society requests the Mayor to instruct the police to give to every person found begging on the streets, in the first place a ticket of investigation to one of the district charity offices, and if such beggar shall refuse to go, or shall be found begging again, then the case shall be treated as an offence against the law, and the beggar shall be arrested and committed to the House of Correction or other public institution. They have also perfected arrangements by which all able-bodied applicants are sent for employment to the Pennsylvania Railroad Company. If a man is in such straits that he cannot wait for pay day, the society makes him a small advance as soon as he has earned it, and protects itself by a lien on his wages. The Mayor replied that he would instruct his officers to arrest all street beggars indiscriminately, and would do all in his power to aid the Society in carrying on their good work.

A similar society is being now organized in New York city, and we sincerely trust that ere long all the large cities of the country will follow this example.

We all know that there are a very large number of men and women who are naturally lazy, and who, having no self respect, do not hesitate

to beg. To such it is much pleasanter to pass the bad days of winter in some Almshouse, and when Spring time comes to stand or sit in the bright sun and receive the numerous pennies of the passers-by. This is the routine of these professional beggars. They are no benefit to society, they play no part in the general progress of human nature, they really constitute foul ulcers on the body politic, and it is high time that they should be reformed. Those that are able must be made to work; those who are physically incapacitated should be isolated and not permitted to remain objects of horror and disgust on our public highways.

BOGUS DIPLOMAS.

Personalities are usually objectionable, and are generally avoided by this journal. Occasionally, however, they become necessary, as in the present instance, to warn the public of pitfalls that may be awaiting them. The *New York Times*, of a recent date, has the following, which should be given all possible publicity by those who know and are familiar with the past history and nefarious practices of the party concerned:—

"Dr. Buchanan's most recent exploits and escapades have borne fruit quite worthy of themselves, and perhaps quite comforting to the Doctor. Some of his friends at Detroit, aided by a truly formidable, and as truly obscure, host of M.Ds., L.Ds., Sc.Ds., and what not else in the degree category, have organized a college called the Medical Department of the Detroit University, and sent out their 'annual announcement;' whether the first or the twentieth such does not appear, but evidently the first, and probably the last. It is not published at Detroit, but at Jackson, seventy miles away, and sets forth, in language which, if grammars were unknown, might be called English, that the college's aim is to remedy a growing evil; which growing evil appears to be the admission to existing medical schools of persons unprepared to receive an education, owing to the 'want of a suitable preparatory prerequisite to a proper understanding of the branches taught." The University has been founded in Detroit for the reason, among others, that Detroit has large manufactories and many hospitals, which furnish a great amount of 'clinical material.' Moreover, the city has a public library of over 40,000 volumes, which are free to all, and a population of 140,000 souls. Truly useful these attractions will prove for the coming students of the Detroit Medical School; for, so far as can be learned, they are the only ones that the school can offer them. We are gravely told that the college building is 'a large and commodious structure in the most desirable locality,' which locality appears to be the immediate neighborhood of a grist mill, and this 'commodious structure' a loft of the said mill. For the Registrar's office intending students are directed to a house 'just four squares west of the City Hall.' On going to the place the names of four physicians are found outside, on tin signs, beneath the words 'Institute of Rational Medicine,' while a dirty card has, in pencil, the words 'rooms to rent,' and another tin sign announces the abiding place of a 'Marriage Assurance Association.' One H. S. Thomas is the college president. He was graduated by the eminent Dr. Buchanan himself, and is now an able 'cancer doctor.' Of his faculty and trustee associates the names of only three can be found, in all Detroit, and one of them, his address being obtained, appeared to live over a manufactory of wagon grease, but nobody there knew he was a doctor. President Thomas did Buchanan a good turn when good turns were welcome to him. Buchanan found a refuge in Thomas' house, the Detroit people say, while the officers were hunting him out, just before that fortunate escape of his to the Queen's dominions."

HIGHER MEDICAL EDUCATION.

It is plainly evident that the medical profession of the United States is commencing to realize the necessity for elevating the standard of medical education. The praiseworthy action of the University of Pennsylvania has been followed by measures in New York looking toward the same end.

The New York State Medical Society has proposed two bills to the attention of the legislature, which, in substance, are as follows: When a candidate for practice has completed his preparation, and obtained his diploma from a college, before he can actually enter upon medical practice his qualifications must be verified by a higher board, not composed of those to whom he has just paid two or three years' fees, but of men who have no interest in passing him. From this body he receives a second diploma, registry of which entitles him to practice medicine in the same manner as that of his college under the present law. The proposed law applies to all medical sects, and the candidate is to be examined, not necessarily in the principles taught in the regular school only, but in those of the school under which he may elect to practice. In commenting on these bills, the New York *Times* very sensibly says:—

"Possibly no better way could be devised by the Committee on Legislation than to avail themselves of the existence of that indefinable body, with vast advisory and no real powers, the University of the State of New York. The Regents have certainly the power to confer diplomas, and it might have been objectionable to establish a sort of medical university for the purposes of the statute. One fails to understand, however, why a second diploma should be necessary, since the candidate is already well armed in that respect. It would seem, indeed, with all due deference to the doctors, that a law authorizing and directing a Governor to appoint boards of medical examiners, defining their composition and duties, and making the registry of a license or certificate from such a board a condition precedent to practice, would answer all the requisites of popular protection and meet all the requirements that are met by the bills as printed. Such a mode of dealing with the subject would not add materially to official procedure, while securing all the ends for which Prof. Jacobi and his coadjutors are laboring; ends in the highest degree desirable."

Notes and Comments.

Section of the Spinal Accessory Nerve.

At a recent meeting of the Acad. de Médecine, M. Tillaux presented the interesting clinical history of a patient in his service. She first entered the service of M. Desnos, suffering from a species of spasmodic torticollis, the head being twisted toward the right shoulder; this phenomenon was accompanied by considerable pain about the occipito-vertebral articulation.

The general opinion was that there existed functional spasms of the sterno-mastoid muscle.

M. Vulpian advised electricity, and this, with metallo-therapy, the bromide and iodide of potassium and other remedies, were employed without any amelioration in the condition of the patient, who desired an operation to put an end to her sufferings.

It was at this period that she entered M. Tillaux's service at the Beaujon Hospital; after mature consideration of the case he divided the inner portion of the sterno mastoid muscle, very near its insertion to the sternum. This operation procured no relief; the spasms were as intense as before for eighteen months afterwards.

In the opinion of M. Vulpian, who first examined the case, the cause of these spasms lay in the spinal accessory nerve, and as M. Tillaux was of this opinion also, he decided on excising or dividing the nerve. An incision was made, parallel with the posterior border of the sterno-mastoid muscle and between two lines drawn horizontally, the upper from the angle of the jaw, and the lower from the superior border of the thyroid cartilage. The nerve was divided and the wound rapidly cicatrized under antiseptic treatment.

Considerable benefit was obtained from the operation, the face was still drawn toward the right shoulder, but the movement was not so spasmodic; the patient could control and even resist it.

The spinal accessory nerve has been studied from a physiological point of view by Claude Bernard, who considered it as essentially the nerve of phonation. In the present case M. Tillaux's patient has not manifested any change in the voice, or any defect in articulation.

Compound Dislocation of the Ankle.

A a recent meeting of the Surgical Society of Ireland (*Medical Press and Circular*), Mr. Thornley Stoker exhibited a specimen of compound dislocation of the ankle, which was so severe as to require amputation. The dislocation was of the most usual form, that of the foot inward and of the two bones of the leg outward. In addition to the dislocation and the laceration of the soft parts, the malleolus of the fibula had been fractured transversely on a level with the transverse surface of the tibia, while the malleolus of the tibia was similarly broken off from its attachment, and remained connected in its usual position, on the inside of the foot. While the fracture of the fibula was quite transverse, that of the tibia extended upward and inward. The injury was caused by a kink of chain catching round the man's leg, while the anchor was being weighed.

Supposed Ovarian Neuralgia.

Dr. J. W. McAfee reports the following case in the *Pacific Medical and Surgical Journal*, which he considers an inexcusable mistake in diagnosis, and showing the fallacy of treating symptoms. A young lady, aged 22, had suffered for six years from neuralgia of the right ovary. For the first three years the attacks were slight and irregular, gradually increasing both in duration and severity. She had received all kinds of treatment for three years without avail. She finally became quite melancholy. General health and menstruation regular. External examination revealed neither tenderness nor enlargement in the ovarian region. Examination per vaginam showed uterus enlarged, but not painful on probing. Anterior lip of cervix large, dark and congested; posterior completely denuded of its epithelial coat, and covered with

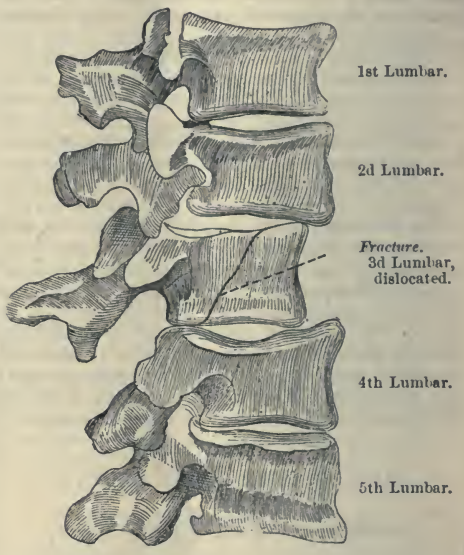
large fungoid granulations, which had a tendency to bleed on the slightest provocation. From this granular surface was poured out a thick, tenacious discharge, streaked with blood and pus. After thorough cleansing, iodine was applied, and the parts dressed with absorbent cotton and bismuth cream. Ordered a douche of one gallon of hot water to be used night and morning and discontinued all drugs. The next day the anterior lip of the os was much swollen, dark and tense; with a sharp bistoury he made several punctures, which bled freely and gave much relief. This treatment was continued for ten days without much change. It was now determined to use nitrate of silver. The stick was applied freely to the denuded surface, as well as the cervical canal. It acted like a charm; the improvement was rapid and steady. After a few days the ovarian pain had almost entirely disappeared. After eight weeks of treatment the uterus was reduced to its normal size, discharge disappeared, and the cervix was reduced to a healthy condition. The ovarian neuralgia was completely cured.

Epithelioma of the Œsophagus.

At a recent meeting of the Surgical Society of Ireland (*Medical Press and Circular*), Mr. H. G. Croly showed a specimen of epithelioma of the œsophagus. The patient, aged 60, was admitted into the hospital on the 22d of last December. It was remarkable how little pain he suffered. There was syphilis in the history of the case. On trying to swallow, spasmodic efforts were made to get food down; but it was immediately rejected. He was able to swallow a little soda-water and milk. Finally he became utterly unable to swallow anything. Gastrotomy was performed and the man died the next day. In the specimen was observed very perfect adhesions between the peritoneal surface of the stomach and the abdominal walls. The situation of the annular stricture was a little below the crossing of the left bronchus. There was no disease of any surrounding parts.

Fracture and Dislocation of Vertebra.

Dr. Isaac W. Chisholm writes to the Cincinnati *Lancet and Clinic*, that the case of fracture and dislocation of the third lumbar vertebra, which he reported in full in the *Lancet and Clinic* of September 27th, 1879, has so far recovered, a little over three years after receiving the injury, as to be able to act as salesman in a store without any artificial support whatever, and never uses a cane or crutches unless he walks a long distance. The following cut represents the seat and extent of injury:—



Sign of Pregnancy.

Dr. Delattre mentions, in the *Gaz. des Hôpi. taux*, what he considers a constant sign of the beginning of pregnancy, namely, the almost complete disappearance of the phosphates from the urine. The author believes that they are condensed into the bones of the mother, forming osteophites, during the first months of intra-uterine life. During the last months, the fœtus developing rapidly, this reserve of phosphates is drawn upon, the bones of the child increase in weight, and the osteophites gradually diminish, until they finally disappear, usually after the first month of nursing. Where the mother is weakly, instead of having these reserves, she is compelled to borrow from her proper substance the necessary elements for the nutrition of the fœtus, and her strength becomes exhausted. In such cases the author recommends the use of phosphate of lime during the whole course of the pregnancy.

Cardiac Dyspnœa.

M. Sée recommends, for the relief of the constant dyspnœa present in certain affections of the heart, the following potion:—

℞.	Potass. iodid.,	gr. xv to	ʒ ss
	Chloral. hydrat.,	ʒ ss to	ʒ j
	Syr. acaciæ,	ʒ iv.	M.

To be taken in tablespoonful doses every two hours.

The choral may be replaced by 1 to 2 grains of extract of opium. When dyspnœa is not constant, iodide of potash is useful against the attacks, and inhalations of the iodide of ethyl, which succeed in asthma, may be tried.

Hypopyon.

The *Medical Press and Circular* says that Dr. Just recommends *massage* of the globe of the eye, which consists in pressing and rubbing gently the organ with the lower lid intervening. In this way he has succeeded in causing to be absorbed a purulent collection in the anterior chamber of the eye. Another oculist has been able to provoke rapid absorption when the hypopyon was mobile, by making the patient lie alternately upon the right and left side, and causing him to change position every hour.

Correspondence.

Ovariotomy—Death Third Day After Operation.

Ed. Med. and Surg. Reporter:—

Mrs. C., 48 years old, mother of eight children (one deceased). I have treated her professionally frequently, for several years (I was called in consultation eleven years ago, and diagnosed at that time metritis), for menorrhagia, pruritus vulva preceding and accompanying menstruation, profuse leucorrhœa and prolapsus uteri; also for indigestion, which last has been almost persistent since last Spring; nausea and vomiting frequent, and pain located in the epigastric region. I detected, upon examination, September 9th, 1881, a small tumor, size of hen's egg, in left iliac region, and upon my next visit she informed me that the enlargement had subsided; that she had been subject to pain and enlargement occasionally, in the same region, for over twenty years. The symptoms of indigestion continued, but she did not complain to me of pain in the iliac region again until November. I made second examination November 21st, and ascertained the tumor had enlarged rapidly and was indurated and nodulated, and ascended to a point midway between the os pubis and umbilicus. I diagnosed ovarian tumor, solid in consistency and malignant in character. Dr. Clark met me in consultation, and concurred in the diagnosis and prognosis. Prof. Peck saw the case February 5th, and stated that an operation was the only remedy, and performed the operation on February 12th, 1882, in presence of Drs. Hunter, Adair, Beck, Hill, Dixon, Dilly and myself. The operation lasted one hour and twenty-five minutes. Tumor weighed six-and-a-half pounds, fibroid in character, and attached to fundus uteri, broad ligament and left ovary. Death ensued third day after operation.

Remarks.—I presume the case would have terminated fatally if the operation had been performed sooner, judging from character and rapidity of growth and irritability of stomach. Mrs. C. was opposed to any surgical measures until after Dr. Peck saw her. C. E. Quire, M.D.

Lynnville, Iowa.

A Peculiar Case.

Ed. Med. and Surg. Reporter:—

I would like to inquire of the readers of the Reporter if the following case was not a little peculiar:—

Was called, April 25th, 1879, to attend Mrs. Addie E. G., it being her fourth pregnancy. I arrived at 8 A.M.; girl baby born at 11 A.M., A 1, weight 7 lbs. I was attending to the child, when the mother called me to her, saying she was having severe pains. I barely reached her when an odd looking tumor-like object rolled out on the bed, and my first thought was that it was some kind of a tumor, but there appearing to be something moving in it, I cut or broke open the sac or membrane, and found a second living child, with the placenta; this was a boy, and weighed 4½ lbs.; he looked like a little, queer old man; but he never seemed to thrive, and died about three weeks later. The mother was a large, fleshy woman, and weighed about 280 pounds. The peculiarity of this case is that the second child was enclosed in a sac or membrane, the sac being entire, smooth and unbroken.

I have practiced medicine only thirteen years, and have not more than between 50 and 60 cases of midwifery a year, on an average, so that perhaps there have been such births; but it appeared queer to me, and I have often thought of it, and at last concluded to send you an account of it, just as it happened, copied from my note-book.

Lincoln, Me. C. Fuller, M.D.

News and Miscellany.

Kentucky State Medical Society.

The twenty-seventh annual meeting of the Kentucky State Medical Association was called to order by the President, Dr. J. W. Holland, at 2.30 P.M., Wednesday, April 5th, 1882, in the rooms of the Polytechnic Society of Kentucky, in the city of Louisville, a large number of the representative men of the profession from all parts of the State being in attendance.

The minutes of the previous meeting having been published in pamphlet form by the Permanent Secretary, Dr. Lewis S. McMurtrie, and distributed to the members within a few days after the preceding meeting, their reading was dispensed with and the report of the Committee of Arrangements called for.

Dr. Dudley S. Reynolds, chairman of the committee, reported, in a few brief sentences, that the adoption of a new Constitution at the previous meeting, by which many of the long-established usages had been changed, rendered it somewhat difficult for the Committee of Arrangements to provide adequately for the present meeting. The committee, however, after much deliberation, had concluded that the design of the State Association is to assemble for interchange of professional opinions upon live questions, and to advance the material and scientific interests of the profession in Kentucky.

The reports of the officers and standing committees were all received, after which the President, Dr. J. W. Holland, delivered an introductory address.

Dr. Holland congratulated the Society upon the auspicious surroundings attending this opening of the meeting, and regarded it as a matter for congratulation that the nomadic habits of the Association had begun to be abandoned. He referred to the disadvantages attendant upon the previous migratory customs of the Society, at the same time not neglecting to discern the fact that regret must follow the departure from long established customs and the varied scenes and associations that attend a change of situation for the brief period allotted to the meetings of the Society.

State medicine claimed a worthy notice, in the discussion of which the President took occasion to emphasize the necessity for more complete vital statistics and better regulated returns of marriages, births and deaths, in order to facilitate the harmonious action of united efforts in sanitary regulations.

The well-worn and perplexing theme of the regulation of practice was not forgotten, and the previous inefficient acts of the legislature were referred to. He concludes that thirty years' experience has taught us not to put much faith in acts of the legislature as great moral levers. As an evidence of the necessity for some sort of regulation, the Secretary of the State Board of Health for 1879 reported, as among the unclassifiable causes of death, "falling of the brain," "ulcer of the brain," "nervous irritability," "bold hives," "diseases of females." Within the year the mortuary reports of Louisville have several times quoted (may the good Lord deliver us) "delicacy" as the cause of death.

Concerning the recent action taken by the New York State Medical Asscciation, Dr. Holland said, "In effect it approves of any of the members of that Society and others in affiliation therewith, when they meet in professional comity persons of the class considered heretofore as outlaws."

In concluding, the President said, "The forty gentlemen who organized this Society had in view the promotion of the honor of the profession, and crediting them with unusual zeal in taking that first step, let us be guided by the precepts they then endorsed, and fired by the examples they have since furnished us. Within the month, the death of one of them prompted in me the thought that the title to the regard of posterity which Dr. Foree held in common with all healers and teachers is strengthened by the additional claim that he was one of the first in our State to urge medical association for the high aims we posesss. His individual life among us has come to an end, but in the corporate life of the humane organization which he helped to establish and maintain he shall find an earthly immortality. Other names then enrolled, of men no less deserving of praise, have been marked with the sign that denotes an eternal absence from its councils. In the texture we weave, their many colored threads, brought once and again into the pattern by the shuttle of time, shall give neither hue nor form again. In our annals they may have left little record to boast of, and even in their own journals little is written of their worthiest deeds. Turn the pages of their visiting lists and a monotonous row of crossing lines is the only trace you will find of many acts of benevolence, of the light and joy they brought to many thresholds. Nothing but lines to tell the story of anxious watching by the couch of pain and the sweet repose secured by the healer's art. Nothing but lines to mark the hard fought field which restored some regal mind to its lawful throne. Nothing but lines to stand for the dearly prized lives turned back to us as they were about to pass the gateway that lets men out from the golden circuits of the sun."

The society then adjourned till Thursday morning.

THURSDAY'S SESSION.

The morning hour devoted to the transaction of miscellaneous business having been consumed by the reports of the various committees, the regular proceedings of the day were opened by a report on the Progress of Surgery, by Dr. W. O. Roberts, of Louisville.

The question of antiseptics, Dr. Roberts said, occupied no more settled ground in the professional mind than it did immediately after its introduction. In abdominal surgery their use has been abandoned entirely by Dr. Keith, of Edinburg, though he still places implicit confidence in their efficacy in other operations. The general drift of professional opinion, however, seems to favor the reliance rather upon the drainage tube than upon any use of antiseptics. In abdominal or Fallopian pregnancy the year just passed has witnessed a revolution in reference to the disposition to be made of the placenta after operation. Instead of its removal as before, it is now insisted upon, by many leading authorities, that it shall be allowed to remain within the cavity, to await the process nature substitutes to detach it on the one hand or remove it by absorption on the other, or render it innocuous by encapsulation. Previous to the advent of the doctrine of antisepsis the operations of nephrotomy and nephrectomy had not been frequently performed, and they had been attended by a large mortality. Since its promulgation, probably because of greater care and cleanliness, these operations have been more frequently performed, and altogether very much more frequently successful. Abdominal transfusion has been established as a legitimate procedure by actual experiment, the hæmoglobine having risen in twenty-four hours from 38.8 parts to 57.9. In the treatment of gunshot wounds of the abdomen the importance of operative interference to cleanse the cavity is now emphasized, and Dr. Marion Sims has declared that those who practice the old expectant plan of management should be held accountable for non-interference, since such cases so uniformly result disastrously.

Dr. Roberts referred to several other points in detail, but unfortunately, the paper, though interesting, was not discussed.

Dr. Wm. H. Wathen next came forward with a paper on "Abdominal Section for the Removal of the Fœtus." Dr. Wathen holds that the increasing percentage of success under the improved methods in abdominal surgery justifies a

timely operation in the interest of both mother and child, and should have the preference over craniotomy. In the early operation 82 per cent. of children have been delivered alive. The success of the double operation has been remarkable. Of nineteen double operations, upon eight women, but three deaths have occurred; and upon forty-eight women a single operation has been performed, with but seven fatal cases. Dr. Wathen very justly holds that the performance of the operation in the future cannot be based upon the statistics of the past. They have been based upon cases of all classes, and into them enter many cases that were hopeless, because not timely. The operation should be performed as an operation of election, and if performed in time, the cases resulting fatally, under proper precautions, would be reduced to a very small per cent.

In discussion of the paper Dr. Yandell took exception to these deductions, because of the unreliability of statistics.

In reply, Dr. Wathen said, "Dr. Yandell is correct in his remarks concerning the unreliability of statistics, but he has shown how the statistics may be corrected. This has already been done, in this country, by Dr. Harris, of Philadelphia, and he has thus arrived about as near the truth as we usually do in capital operations. Therefore, instead of being insufficient data, as he claims, from which to draw logical conclusions, they are quite as ample as the data he claims to have based his conclusions upon concerning tetanus."

Dr. A. D. Price of Harrodsburg, the President elect, was at this time conducted to the platform, when he said:—

"Gentlemen, I thank you for the unexpected honor you have conferred upon me. Unsought, it comes a welcome gift from my professional brethren. I fully realize the responsibilities you have imposed upon me, and I shall endeavor to discharge them faithfully and impartially; at the same time it is expected that you, in the liberality of your hearts, will forgive much. It shall be my pleasure to uphold the interests of the medical profession. Hoping at another time to have something to say worthy of your attention, I beg to wish you, when the proceedings of this meeting are closed, a safe return to your homes and the duties which there await you."

Dr. Greenly next presented a paper on "Fasting." It possessed but little scientific interest.

The next paper presented was by Dr. M. F. Coomes, of Louisville, on Color-blindness, during the discussion of which Dr. Coomes took occasion to exhibit an instrument, consisting of a cylinder, whose sides were composed of eight different-colored glasses placed inside of another brass cylinder, in the side of which is an opening of the size of one of the pieces of glass composing the sides of the inner cylinder. These cylinders being placed, and a small lamp placed inside, the inner cylinder is made to revolve upon its axis, bringing the different-colored glasses over the open space between the flame and the eyes of the person whose perception is to be tested. The instrument is intended to take the place of the lantern test, which it does very admirably. In the discussion of the subject the doctor said, "Color-blindness may be congenital or acquired. The humors of the eyes of the color-blind do not differ in any manner from those of persons who possess the normal color sense."

The afternoon session was opened by a report on Dermatology, by Prof. L. P. Yandell. Prof. Yandell said, in introducing the subject, that John Hunter declared, a hundred years ago, that there were three classes of skin affections, one of which is cured by mercury, a second by sulphur, and the third the devil himself can't cure. One of the cogent reasons for the neglect shown toward these affections is the confounding confusion which is found in the nomenclature and classification of skin diseases. Having devoted special attention to the subject during a practice of ten years, and having mastered the subject, so far as library study would permit, he devoted a year to the study of skin affections in the European hospitals. He found, on his return, that his theoretical knowledge had increased; but, practically, he was as helpless as before. Driven to study the subject himself, he had gradually developed a system of practice which he has pursued with almost uniform success for a number of years. By this system he claims to have reduced the cure of skin diseases almost to a certainty. But, notwithstanding the fact that he had endeavored for the last ten years to disseminate and illustrate the nosology and etiology of these affections, he had been frequently accredited with acknowledging but three sources of disease, viz., malaria, scrofula, and syphilis.

Dr. Yandell asserts that he never has expressed nor entertained such a tripodal opinion. But he does maintain that while the manifestations of disease are numerous and varied, the causes of disease are few, and very generally comprehended by the following list: malaria, scrofula, the catarrhal poison, the specific poisons of contagious infections, the mineral and vegetable poisons, insufficient light and air, parasites and traumatism. Most conditions called disease are but symptoms of disease. Dr. Yandell maintained that the only curable contagious disease is syphilis, unless erysipelas, diphtheria and puerperal fever be added; but, he supplemented, very few of our patients are under favorable circumstances for recovery. "Many diseases," said he, "claimed to be incurable I claim to be curable entirely when the subject is placed under circumstances that favor recovery."

In a nutshell, Dr. Yandell believes most diseases due to the causes he has mentioned, and a large majority of them due to malaria and scrofula. The third class of skin affections referred to previously he believes to acknowledge an underlying scrofulous cause and an exciting or malarial cause. On this foundation his treatment is predicated, which consists of antiperiodics and tonics; in short, the treatment for consumption.

Dr. Yandell's paper elicited much interest and some discussion, which space does not permit.

Prof. J. M. Matthews, of this city, made some oral remarks on the subject of "Divulsion in Stricture of the Rectum."

Dr. Matthews said, "I beg to speak for a few moments on the subject of stricture of the

rectum and its treatment, and I shall take occasion to refer incidentally to the treatment by divulsion. This subject is of more importance than would appear at a glance. Few are aware of the number of cases that present themselves to the surgeon within a year. I do not know any disease that calls for surgical interference that is of more importance and deserves more careful consideration. It is one of the most harrassing afflictions that can affect a patient. Besides being one of the most painful, it is, as a rule, when it comes under the care of the surgeon, beyond the hope of any permanent cure. If, then, there is any operation that can be devised to mitigate, if not to radically cure this affection, we certainly ought to consider it. Cases of obstinate constipation not infrequently come under the care of the physician; and in these, not once in a hundred times is a local condition sought in order to explain it. I was glad, however, to hear the expression, a local manifestation of a constitutional disease. Although the consideration of the etiology is too great to begin upon in one discussion, yet, in a general way, the causes of stricture of the rectum may be enumerated in the order of their frequency, as follows, viz.: syphilis, cancer, traumatism."

Dr S. J. Rhodes, of South Carrolton, next read a paper on the subject of "Iodide of Potassium in Recurring attacks of Pneumonia." His illustrative cases were adapted to prove, as he claimed, the efficacy of the drug during the convalescence from an attack of pneumonia, as a prophylactic against subsequent attacks, and an unfavorable degeneration of the products left by the disease.

Dr. Ap. Morgan Vance read "some Practical Suggestions in the Treatment of Spinal Caries." His paper was well received. He also presented to the Society a case which he had operated upon for knock knees.

Dr. A. W. Johnson, of Danville, read a paper on "Carcinomatous Metamorphosis."

FRIDAY'S SESSION.

Dr. Lanaber, of Louisville, read an interesting paper on Cerebro-spinal Meningitis. Dr. Lanaber detailed several interesting cases, and spoke at some length on the subject of complications of the disease with pneumonia.

Dr. A. H. Kelch, of Louisville, made some observations upon obscure brain lesions. This paper, laying aside the anatomical grounds upon which the conclusions were based, maintained, that the choked disk, upon the subject of which there is a diversity of opinion, occurs as a result of those conditions of the brain which interfere with the circulation of the blood through the ophthalmic artery, between its origin between the nates and testes and its distribution at the cribriform plate of the sclerotica. Also, that the nervous manifestations produced by any adventitious product in the brain will depend entirely upon the seat of such product, and not its character. Let it be syphilitic, cancerous or tubercular in character; let it be due to traumatism from the rupture of an artery or due to any of the various causes that may produce pressure on the substance of cerebral ganglia on the cerebral substance.

The paper was discussed by Drs. L. P. Yandell, J. A. Octerlony, J. W. Holland and Von Dorehoff.

Dr. Reynolds exhibited several specimens of glass which had changed color by exposure to light, and demonstrated the defective quality of the glass ordinarily used for making spectacle lenses. He showed that commercial crown glass contains adulterating materials, sometimes iron, lead, or manganese. Such glass, on being exposed to the air, soon changes color, and ceases to be even an approximately correct refracting medium. He pointed out that optical glass is a more carefully prepared form of crown glass, the alkaline salt used being the borate of soda. He also demonstrated that commercial crown glass cannot be worked over so as to render it fit for optical use, and stated that the quantity of borax required to produce a good quality of optical crown glass, which shall be entirely achromatic, could never be accurately determined. The chief point of importance, however, being the necessity for very prolonged fusion at a uniform temperature, and a prolonged and, as nearly as possible, uniform reduction of temperature to the desired point of cooling. He then demonstrated, with an improved form of Snellen's phakometer, the perfectly unreliable quality of commercial lenses, showing both their want of symmetry and accuracy of gradation, according to either the English, German or French scales for grading lenses. His experiments were brilliant, and were applauded by the Society.

In the afternoon papers were read by Dr. A. M. Cartilage, of the City Hospital, on Acute Brominism; by Dr. Brandt on Tubular Diarrhœa.

About this time it was moved by Dr. L. P. Yandell, after some preliminary remarks, that a committee be appointed to express the sentiments of the Society as to the recent action of the 80 doctors representing the profession of the State of New York.

The committee was appointed, and reported through its Chairman, Dr. Octerlony, as follows:

WHEREAS, Resolutions have recently been adopted by the State Medical Association of another State, subsersive of the code of ethics of the American Medical Association.

Resolved, That the State Medical Society of Kentucky regard the code of ethics of the American Medical Association the best code now extant for the governance of honorable and scientific medical men, and that we hereby declare our firm and unfaltering adhesion to the principles of said code, and deprecate any change in it until such a change can be devised as can be clearly shown to be desirable and an improvement upon the code now in force.

Resolved, That our representatives at the approaching meeting of the American Medical Association are hereby instructed to give their votes and influence in favor of the code as it now stands.

Then, after a vote of thanks, including everybody and everything, the Society adjourned to meet in Louisville, on the first Wednesday in April, 1883.

Consultations.

"A single doctor, like a sculler, plies;
The patient lingers and by inches dies;
But two physicians, like a pair of oars,
Waft him with swiftness to the Stygian shores."

Prevention of Venereal Diseases.

From the *Archives of Dermatology* we note that the following Act, prepared by the American Public Health Association, is to be presented to the Legislature of Maryland:—

ARTICLE 1. Be it enacted by the General Assembly of Maryland, That any person who shall knowingly communicate, or be instrumental in communicating, by any direct or indirect means, a contagious disease, such as smallpox, scarlet fever, or venereal disease, shall be deemed guilty of a misdemeanor, and shall be subject, upon conviction in any of the Circuit Courts of the counties of this State, or in the Criminal Court of the city of Baltimore, to a punishment of six months' imprisonment in the House of Correction of Maryland.

ARTICLE 2. Be it further enacted, That if any person, being the owner or occupier of any house, room, or place within the limits of this State, having reasonable cause to believe any person to be affected with a contagious disease, induces or suffers such person to remain or be at that house, room, or place, he shall be deemed guilty of a misdemeanor, and on summary conviction in one of the Circuit Courts of the State, or in the Criminal Court of the city of Baltimore, shall be liable to a penalty not exceeding one hundred dollars, or, at the discretion of the Circuit Courts of the State, or of the Judge of the said Criminal Court, be imprisoned in the county jail of the county in which conviction takes place, or in the Baltimore city jail, for any term not exceeding six months.

ARTICLE 3. And be it further enacted, That the State Board, with the approval of the Governor, and the Health Board of the city of Baltimore, with the approval of the Mayor, shall have power to remove to a hospital or hospitals all persons suffering from contagious diseases, who, from failure to take proper precautions, imperil the health of the community.

ARTICLE 4. And be it further enacted, That this Act shall go into effect on the first day of June, eighteen hundred and eighty-two.

This sets a good example, that all of our States would do well to follow.

Compulsory Vaccination in Indiana.

From the *National Board of Health Bulletin*, we note that the following special rules concerning vaccination have been issued by the Indiana State Board of Health:—

1. After January 1st, 1882, no person, until they have been successfully vaccinated, shall be admitted into any public or private school or institution of learning within this State, either in the capacity of teacher or pupil, and all persons admitted therein shall present to the principal thereof the certificate of a reputable physician as to the fact of their being successfully vaccinated.

2. It shall be the duty of all unvaccinated persons within this State to be successfully vaccinated within sixty days from January 1st, 1882. And all unvaccinated persons coming into the State shall be required to be vaccinated within sixty days after coming into the State.

3. All children born within this State shall be successfully vaccinated within twelve months after birth. All vaccinations shall be with reliable bovine virus.

British and American Physicians in Paris.

With a view to promote social intercourse and maintain good fellowship between British and American physicians, a society has been formed, under the name of the "British and American Medical Society of Paris." Membership is limited to British subjects and citizens of the United States of America legally entitled to practice as physicians in Paris, and actually doing so. A certain number of dinners are appointed to be held annually; the first took place on February 1st. Among the members who form this society are Dr. McCarthy, Sir John Rose Cormack, Dr. Thomas Bishop, Dr. the Hon. Alan Herbert, Dr. Pratt, Dr. Marion Sims, Dr. Johnston, Dr. Faure-Miller, Dr. Jennings, Dr. Murray, Dr. Pepper, Dr. Rowlatt, and Dr. Loughnam, etc. The President for 1882 is Sir John Rose Cormack, and the Vice-President Dr. Bishop.

Hygienic Value of Electric Lights.

From the *British Medical Journal*, we note that *La Nature* summarizes a communication from Dr. Javal, who believes that the electric light is absolutely without danger to the sight, in consequence of the amount of division that can now be obtained in it. *L'Union Médicale* says, "The observations of Drs. Blasius and Hoppe, in a discussion which took place at a meeting of the Brunswick Society of Natural Sciences, are also noteworthy. These scientists have shown that illumination by the electric light deserves preference over all other methods in use, for the following reasons: 1. It does not pollute the air with deleterious gases or other unhealthy products. 2. It induces a greater visual unity than with daylight and gaslight. The conclusion adopted by the meeting was, that "the hygienic qualities of the electric light have not hitherto been appraised at their real value."

A New Medical College.

A new and apparently very liberal college, to be known as the "Illinois State University of Medicine," has been organized in Chicago. According to the Chicago *Medical Journal and Examiner*, its professorships will be unlimited, a new chair to be created for every worthy candidate, which will probably result in giving the title of "*Professor*" to every physician in Chicago.

Disinfection.

Dr. Arthur Hill Hassall writes to the *Lancet*, about the danger of conveying contagious diseases from one person to another through the agency of clinical thermometers, and suggests that physicians carry around with them a small phial containing a solution of permanganate of potash or carbolic acid, into which they should dip the thermometer after each use, and then thoroughly dry. Similar precautions should be used in the

case of throat brushes; and since it is almost impossible to ensure the thorough purification of sponges that have been used once, imbued with animal matter, more particularly in a state of decomposition, or which have become infected with bacteria, they ought on no account to be used for more than one operation.

D. Hayes Agnew Medical Association.

A number of physicians of Philadelphia have permanently organized the "D. Hayes Agnew Medical Association," by electing as officers for the current year: President, Dr. F. O. Nagle; Vice President, Dr. G. P. Oliver; Secretary, Treasurer and Librarian, Dr. G. Maxwell Christine. Among the objects of the Association are the circulation of medical books, pamphlets, essays and journals, and at the monthly meetings of the body discussion of subjects relative to the profession. The meetings are held on the evening of the first Tuesday in each month.

Hydrophobia.

From a daily cotemporary we note the following marvelous instance of the immense vitality of the toxic agent of rabies; when and where will it stop?

"Some ten days ago, a dog bit a cow. The cow, subsequently, showed signs of hydrophobia, and was killed. A youth, nineteen years of age, who washed the cow's leg after the animal was bitten, and who had a sore on one of his hands, now shows symptoms of hydrophobia."

Examination of Wines.

The *Medical Times and Gazette* says: From the report of the municipal laboratory of Paris, for the month of December, of 409 samples of wine which were purchased and analyzed, only 79 could be described as good, 145 are said to have been "passable," while 146 are pronounced as bad, and 89 as injurious.

OBITUARY NOTICES.

DR. JOHN OSBORN.

Dr. John Osborn, a well-known physician of New York, died at his residence, at No. 259 West Thirty-fourth street, on Friday, the 24th of March, from softening of the brain, in the sixty-fourth year of his age. Dr. Osborn was born in New York city in December, 1818, and was a lineal descendant from the Rev. Samuel Osborn, who was Rector of the first Episcopal church established in East Hampton, Mass, in 1713. Dr. Osborn's profession might be called hereditary, as his ancestry for several generations have been active medical practitioners. Dr. Samuel White Osborn was his father, and Dr. John Osborn, a leading physician of Middletown, Conn., his grandfather. His uncle, Dr. John C. Osborn, practiced medicine in New York, and his brother. William F. Osborn, is at present a member of the medical profession. Dr. Osborn's son, John Osborn, Jr., who died a few years ago, at the early age of 25, was also a member of the profession which four generations of his ancestors had followed. Dr. Osborn was educated at Columbia College, and was a graduate of the Class of '36. He immediately afterward entered the College of Physicians and Surgeons in New York, from which he was graduated in 1839. He has practiced his profession actively in New York since then, until within the last two years, when the disease which caused his death was first fixed upon him. For the last year he has been confined to his house. Dr. Osborn was a member of the New York County Medical Society, and of the Physicians' Mutual Aid Society of New York, at the time of his death.

DR. J. M. LEON.

Dr. J. M. Leon, a well-known physician, died at his residence, Thirty-fourth and Walnut streets, on the 24th ult., at the age of eighty-one years. He was born in France, and served as a surgeon in the armies of that country. In 1832 he came to Philadelphia, built up an extensive practice, and amassed a large fortune. About fifteen years ago he retired from active professional duties, and since then has been regarded as somewhat eccentric. The deceased gentleman's death was caused by pneumonia.

—Dr. William Gould, an old citizen of Buffalo, is dead. He was born in Cambria, Niagara county, N. Y., June 21st, 1811, and went to Buffalo when a young man. He was graduated at the Buffalo Medical College in 1850. The only public office he ever held was that of Health Physician. He was thoroughly conscientious in whatever work he undertook, and kind-hearted, charitable, and genial.

QUERIES AND REPLIES.

W. H. H.—The formula for Fehling's Solution:—

℞.	Cupri sulph.,		ʒij
	Sod. and pot. tart.,		ʒiss
	Liq. sodii,		fʒivss
	Aq. destil.,	q. s. ad.	fʒviiss.

A. G. M.—In relaxation of the Pelvic Symphyses, Prof Lusk, of New York, recommends a pair of strong breeches, carefully fitted to the thighs and hips of the patient, and made to buckle in front and lace behind, The apparatus is light, comfortable, and answers every requirement.

MARRIAGES.

MYERS—SMITH.—At Louisville, Ky., March 7th 1882, by Rev. J. C. Converse, J. Myers, M.D., of Reno, Ind., and Annie G. Smith, of Louisville.

PITNEY—BLACKMAN.—In Absecon, N.J., March 21st, 1882, by Rev. Allen H. Brown, Jonathan Kay Pitney, M.D., and Charlotte Amanda Blackman, of Port Republic, N. J.

DEATHS.

BURTON.—In Ludlow, Vt., March 20th, 1882, Dr. Putnam Burton, 76 years of age.

CATHCART.—In this city, on the evening of the 28th of March, 1882, Dr. Thomas Holmes Cathcart.

KENDERDINE.—In this city, on the 27th inst., Robert S. Kenderdine, M.D., aged fifty-one years.

MOORE.—Suddenly, at Germantown, Phila., on Saturday morning, March 25th, Thomas Moore, M.D.

PERRY.—In Brooklyn, N. Y., on Wednesday morning, March 29th, John Schoolcraft Perry, M.D., son of Amos S. and Sarah H. Perry, in the 34th year of his age.

SOLLIDAY.—At his residence, Sumneytown, Montgomery Co., Pa., Dr. Samuel Solliday.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1313] PHILADELPHIA, APRIL 29, 1882. [Vol. XLVI.—No. 17.

Original Department.

Communications.

MALARIA.

BY SAMUEL PETERS, M.D.,

Of Cohoes, N. Y.

Read before the Union Medical Society of Saratoga, Washington and Warren Counties, February 21st, 1882.

It seems that the profession is just now waking up to the subject of malaria; and certainly it is high time, for the reason that its influences, dire and insidious, have been working, mostly unrecognized, for all time past. That there is any more now than heretofore, except possibly in some localities, from special causes, I do not believe. It exists now exactly as it did in all the years past; no more and no less. But, thank fortune, the medical profession is beginning to study it with that care and diligence that will result in nothing but good to the human race, not only in its therapeutic management, but in the hygienic measures calculated for its diminution. That it existed many years ago, as now, the writer is able to prove by the fact that he instructed his students that if they would learn well the signs and symptoms of malaria in the human system, and its treatment, they could not fail in becoming good physicians, because a large share of disease ordinarily met with was either solely caused or to some greater or less extent influenced by its insidious yet recognizable workings; and I find in a published record of my own, about fifteen years ago, the following remarks written on the subject of "lumbago":

"Whatever the nature of malaria may be, it is certain that it inhabits the bodies of a large proportion of the population, especially in some regions. It is also certain that it gives character to any disease that happens simultaneously to affect such a body, the same as syphilis, gout or lead does; that it sometimes, and often, so impresses a previous disease as to exercise a predominating influence, and must be neutralized before the disease can be cured; in fact, by so neutralizing it the disease of which it may be called a complication will yield of itself, or more properly speaking, by the powers of nature. To include this whole subject in one brief paper would, of course, be impossible. I may be allowed, therefore, to present some of the salient points involved, some of the more practical questions that are met with in our every-day experience, and leave the rest to be wrought out by our subsequent investigations. Surely our opportunities for observation are numerous, for everywhere the atmosphere is the ready bearer of this insidious poison. I say *everywhere*, because it is conceded that no region of any extent is altogether exempt. The north, south, east and west furnish vast fields for the easy generation of this subtile 'something;' and, indeed, it may probably be declared to be universal."

The writer's experience in the northern, western and southern States of this country enable him to express confidently such a belief. Twenty years ago, during our late rebellion, it is well known that in every part of the country which was occupied by our army our soldiers were severely affected by this cause. So much so that every disease and almost every injury was more or less influenced by it. Take a pneumonia, a dysentery, a typhoid fever or a bullet wound, and ten to one the call came, sooner or

later in the course of its treatment, for the free administration of remedies for malarial complications. Hertz utters this language, however, in the second volume of Ziemssen's Cyclopædia, which to me seems remarkable, viz: In England malaria is encountered but rarely, and is endemic only on the eastern coast and in some of the lowlands of the Thames," and adds, "Scotland and Ireland are free from it." I cannot but doubt the absolute correctness of this sweeping assertion, when over such an extended area the cause of miasmatic emanations, viz: decay of organized matter, must exist. However this may be, there can scarcely be a doubt that it exists, though much less concentrated, and hence not producing the severe but the milder effects in the human body, even in the countries included in this broad assertion. In further proof I will only add that Aitken and W. C. McLean, English writers on malarial diseases, mention no such immunity. The point I make in this part of my subject is that malarial influence is widespread, if not universal; and another point, that it existed for generations past precisely as it exists to-day.

A very important as well as practical question may be discussed at this point, namely, that of *mortality*. In this, as in many other medical questions, physicians disagree; some claiming that it often assumes a form that is speedily fatal, requiring only a few days' continuance to produce such a result; sweeping away the patient in a week or two. Others are of the opinion that ordinarily the poison of malaria is seldom fatal; that it may and does pervade the system for weeks and months, continuing its work but never increasing in intensity far enough to threaten life, unless the subject be in a particularly unfavorable state; even then only rendering it less resisting to the diseases already affecting it, and thus after a period, indirectly aiding the fatal result.

The writer, judging from his personal experience as well as the testimony of writers generally, is decidedly with the latter class in opinion, after watching with some degree of care the operation of miasma in the human economy, and continuing such observations in thousands of cases for the last thirty-seven years.

It is true that in the Pontine marshes, the Campagna of Rome, and some other similar localities fatal results may speedily supervene. Again, in other localities less pestiferous this toxic agent may induce complications capable of contributing to a fatal result; but ordinarily, and in a very large percentage of the cases, no such result is to be expected. Indeed, as a rule, it is comparatively harmless, only as it slowly leads on to a cachexia or perverted state of the whole organism. Even if appearing as a complication of a particular disease, its power, when recognized, is almost always easily neutralized with appropriate treatment mingled with the treatment for the original disease. The fashion, therefore (for I fear it is becoming such at the present day), of ascribing *malaria as a cause* in our severe, or protracted, or fatal cases, should be very carefully considered in the light of truth, which is the only light of science. Few, I have charity to believe, are willing to pronounce such a verdict merely to cover up the want of a proper analysis of the case and the true cause of death. Such a diagnosis may be expected among the irregular and uneducated, not among the devotees of learning and science. The point, therefore, which I note here is that, while malarial disease and complications are very common, it is by no means to be charged with an evil agency in everything.

Having spoken thus openly, and perhaps strongly, on the question of accuracy in diagnosis, it will certainly be proper to indicate the principal symptoms by which we may distinguish the presence of this toxic agent in the human system. This I shall proceed to do willingly enough, yet not without the fear that my brief paper cannot contain all that should be noted on this very important point, for this is really the *fons et origo* of success in treatment.

From the days of Celsus, and perhaps far more remotely, it has been known that *periodicity* is a prominent symptom, one that when well marked is extremely valuable as a diagnostic sign. And further it may be expected to present itself, not only in purely malarial disease, but also more or less distinctly in others in which it forms a complication. True, it may at times be very indistinct; yet careful observation will rarely fail of detecting something of its presence as a modifier of symptoms producing an approach at least toward exacerbations.

Nevertheless, this feature taken alone cannot always be relied on, as is well known. Other diseases, unconnected with malarial poisoning, often present sets of symptoms involving those of periodicity. Notably is this the fact in most brain affections, when, if this symptom be taken alone, the physician may be misled. It will generally be observed in the earlier stages of tubercular meningitis, and it may be often noticed in the severe inflammations of the auditory apparatus, or the frontal sinuses, or the orbit.

In such cases it is evident that great caution is

to be exercised, as a full course of treatment for malaria, especially with quinine, would result in injury. Fortunately we have other equally prominent and corroborating symptoms, one of which is *intermissions*, or notable remissions.

This symptom, like the other, though especially useful and deserving of full consideration, cannot be relied on singly. However, the two taken together furnish valuable evidence.

The *variations of temperature*, as determined so accurately by that valuable little instrument, the fever thermometer, deserve particular attention, especially the character of the rise, which is particularly sudden, and also the very high degree of elevation generally attained, often, and unlike most other affections, reaching 104, 105, 106, or even higher, the first day, as well as in subsequent exacerbations.

Pain in the back is another symptom almost invariably present, generally severe, and voluntarily spoken of by the patient, most frequently occupying the lumbar region, sometimes the dorsal, and sometimes the entire length of the spine. The writer is invariably particular to inquire for this symptom, and considers it a strong diagnostic sign.

It will be observed that I have not spoken of *chills*, which symptom, although of the utmost value as a sign, is so common in other affections that, to be of real significance, we must wait for a repetition at a period subsequent to an intermission. One or two such repetitions occuring at regular periods can be accounted as positive or almost positive evidence of the presence of malaria. One peculiarity in regard to chills is that they are apt to continue for some time after the temperature begins to rise, and a still more notable peculiarity is that the patient is readily chilled nearly all the time, when he moves in bed or is exposed in any way; even during the intermission he frequently seeks a warm room or more clothing. This fact, I think, should be impressed, because it will often alone settle our diagnosis.

I will now speak of a symptom which I think of exceptional value, and which I do not remember as having been referred to by writers, namely, *a moist wrist*. This is scarcely ever absent, and when taken with even one or two other symptoms spoken of, I cannot but believe it to be almost pathognomonic. This moisture has a peculiar sticky feel, and when detected I scarcely feel required to ask the patient another question, because I can describe his case to him as well as he can to me.

But I must not omit to mention another symptom, although my space is limited: A symptom, perhaps of all others the most significant, the most attracting in its meaning, the most reliable. I refer to *sweating*, or free perspiration during some part of each day. Gentlemen, the rule of my life has been to administer quinine in a very large percentage of the cases where this symptom was present, and it is present in our malarious region in many diseases not ordinarily considered malarious. I entertain no doubt, after an extended line of observation, that this rule may safely be followed, always excepting, of course, the cases that do not present a few, at least, of the other symptoms of the presence of malaria.

I am aware that this is a digression, but I have made it in order to more thoroughly impress the rule spoken of. Of course it requires the careful analysis of the careful physician; but it surely is worthy of attention.

A word or two may be spoken in regard to the tongue. It presents an appearance that is quite significant, but hard, if not impossible, to describe. This organ, taken as a whole, is slightly paler than natural, always moist, and evenly covered with a light colored, velvety coat. It is quite recognizable, and once seen always remembered.

A *cough*, sometimes severe, sometimes slight, generally accompanies malarial infection, and many such a cough cannot be broken up unless treated with anti-malarial remedies.

Having now mentioned some or most of the diagnostic symptoms (and this is all of this part of our subject we proposed to do) a brief recapitulation may not be out of place.

To enumerate, then, the symptoms as spoken of and in their order: We have periodicity, intermissions, extremes of temperature, pain in the back, chills, moist wrist, sweating, the peculiarity of the tongue and cough. These are mentioned in the order of their significance, except the perspiration, which is most to be relied on provided it be supported by a few, more or less, of the other symptoms.

It frequently happens that all the subjective symptoms are not present, yet two or more of them are generally sufficient, provided free perspiration, or at least a coolish, damp skin, appearing during some portions of each day, be one of them. With this, and the exclusion of possible exceptions already noted, we are tolerably safe in considering our diagnosis established, and in commencing proper anti-malarial treatment. However, in spite of all due caution, there will occur cases in which we have reason to feel a doubt. In such cases a few small, very small, trial doses, carefully watched, will settle the question on

one side or the other. The skin will begin to open and the intensity of the symptoms abate, or, on the other hand, the heat will be increased or the symptoms aggravated, or both, thus settling the question which before was conjecture.

Before proceeding to a very brief consideration of the treatment, I wish to call attention to a remark in the excellent work of Dr. Frederick L. Roberts on Practice of Medicine, with which I can scarcely agree, namely, that "young children are least subject to malaria." In my own practice I find many cases among children; fully equal to the ratio they bear to the population. Even young infants are by no means exempt, such being more subject than adults to aggravations of the cough named above as a diagnostic symptom. Many a little sufferer with labored breathing and severe cough is rapidly relieved with small doses of quinine.

It is not proposed in this paper to enter into a general discussion of the treatment, but to allude to only a few points.

A word may be spoken here in regard to drinking water, which, as is well known, is a common carrier of this and other poisons. For good reasons we have learned that wells and springs, especially the former, are common sources of malaria, because most of them contain percolations from the soil or surface of the ground, and of necessity the products of decaying matter. In our own city I find this especially true, and hence I am free to discourage the use of such water. Hydrant water is far preferable, and the reason why it is so, probably, is that it has more motion, more friction among its own particles, never lying so still and dormant as in wells. Why may not friction, constant agitation, destroy the spores, or whatever the substance is, of malarial poison? Large reservoirs for cities' supply, wherein the water lays dormant, never in activity only while flowing through the pipes, are not desirable. The smaller the reservoirs the better. The Holly system of water supply may and probably will be found preferable to others. Much might be said on this important subject, but time will not permit. I will merely give a case in point. A family consisting of four persons, by the name of Winterbottom, in our city, was taken with dysentery, only one of its members first. I found this and one other were particular to use the water from a well, not far away; the other two used hydrant water. In a somewhat jocular mood I said to the mother that I would assume to be a prophet! that those who used the well water would suffer most. The result proved my prediction true. The two who drank the well water were very sick; one died. The other two had the disease, but in a much milder form.

I shall occupy my remaining time in speaking of the use of quinine and iodide of potassium as the principal remedies; and arsenic and eucalyptus globulus as remedies in the cachexia of malaria and quinia.

For more than two hundred years quinine has held the sway as the remedy *par excellence* in the treatment of malarial diseases and complications. Little need now be said in regard to it, after the researches of Binz, Bartholow, H. C. Wood and a host of others. In the mode of administration, however, there is some disagreement. Without giving the views of various writers, I wish simply to offer a point or two in my own experience. I find that I give almost invariably small doses; compared with the doses recommended by most others, they are *very* small. Seldom do the doses in my prescriptions exceed one half to two grains, and never, except in rare instances, is it found necessary to go beyond this amount; and during a general practice of many years this has been found amply sufficient. Indeed, ten to twenty grains, or even less, are, in the majority of instances, all that is desired for each case. I am unable to elucidate this, unless I am correct in the belief that in the administration of large doses much of it passes out of the stomach, and meeting with the natural alkalinity of the intestinal secretions, passes off unabsorbed and wasted. Even minute doses are often successful; and how can the fact be explained in any other way? It may, not therefore, be derogatory for a man with many gray hairs to recommend a careful consideration of this point. True, there are cases which require heroic doses, but in my experience they are few. Another explanation may possibly be, that I invariably administer the dose *every four hours*, never less or more. According to Bartholow, Binz and others, about five hours are required for the full effect of a dose to be reached, hence, to administer a dose, for instance, every two hours, or every eight hours, is folly, to say the least; the one exercises a cumulative influence, the other is partially lost. I wish to make every word a point in this matter, because, besides appearing reasonable, it has stood the careful test of many years.

Another point I cannot forbear alluding to is this: How long should quinine be administered to obtain its full anti-malarial effects? I answer forty-eight to seventy-two hours. At the end of this time all the good effects of the remedy may not be fully apparent, but I almost invariably stop its administration, and wait for the result, say twenty-

four hours, when it will generally be found to have accomplished its purpose. If not, it can be resumed for another like period. This is, however, seldom required. If it be not considered egotistical, I would make every word of this also a point for special consideration, being fully satisfied of its general truth.

Again, in regard to the long continuance of the use of quinine, something may properly be said. When this remedy is continued, even in moderate doses, say ten or twelve grains a day for several days, perhaps we may name one or two weeks, or often less, there begins in the patient what may properly be called *quinine cachexia.* The mere mention of this term, quinine cachexia, may convey a slight shock to the mind of the profession, and if so, I must face the responsibility, whatever the result. By the term I do not mean the fullness of the head, the ringing in the ears, the staggering gait, etc., produced by a few full doses, or by a single large dose, but the condition which may be called toxic, and characterized by a far different train of phenomena. These are, taken as a whole, very like the poisonous effects of malaria itself, that is, like intermitting fever. The symptoms of each are so similar that it is easy to be misled unless the history of the case be taken carefully into consideration, the quantity of quinine ingested, and the length of time it has been taken, etc. I have never seen its continued use fail of producing the state spoken of, and, indeed, such a condition has long been recog nized. When it is once reached I am well convinced that quinia has lost much if not all of its salutary properties, and that the sooner its use is abandoned the better. The state for which it was rightfully administered, viz: the injurious presence of malaria, is fully remedied, generally speaking, and the toxic effects of the remedy substituted. With this belief I am convinced that many of the cases of the so-called "obstinate intermittents" are nothing more or less than quinine cachexia. I submit these studies to the careful and unprejudiced attention of the profession, in order that the truth or falsity of my position may be proved. The writer has met with many cases in point, which we cannot here relate, for want of time, and which were cured by simply withdrawing the quinine, and perhaps administering drop doses of Fowler's solution, and waiting a few days or weeks for the removal of the quinine saturation. For the same state iodide of potassium is an excellent remedy, given in small doses, or eucalyptus globulus either, for some length of time. The arsenic, in my experience, is generally preferable.

To avoid the cachexia, I am in the habit of giving the quinine till its full effects are obtained, then continuing treatment with the iodide, if necessary. I believe it was first recommended by Dr. Nonodnitschanski, in the form of the clear tincture of iodine, administered in water, and its good effects have been tested and confirmed by others. See *Braithwaite's Retrospect*, part 83, page 225.

LACERATION OF CERVIX UTERI; ETIOLOGY, PREVENTIVE MEASURES, TREATMENT AND RESULTS.

Read before the Northern Medical Society of Phila.,

BY E. E. MONTGOMERY, M.D.

Our knowledge of the importance of this lesion and the operation for its relief comes from Emmet, though the lesion was given as a cause for sterility by Gardner, in 1856, in his work upon that subject.

Emmet performed his first operation in November, 1862; although he performed it a number of times in the next seven years, he published no account, until in February, 1869, when he read a paper before the New York County Medical Society, on the surgery of the cervix. In this publication he was preceded a few months by a paper from M. A. Pallen, describing practically the same operation, though unaware of Dr. Emmet's work.

The lesion and operation, however, made but little impression upon the general profession until a second paper by Dr. Emmet, in 1874. Since the latter date it has been extensively performed, and is now probably recognized as the most frequent gynæcological lesion and the one most demanding relief.

Authors differ greatly as to its frequency. Emmet found it in 32.80 per cent. of the women who had borne children, applying to him for relief of uterine disorders. Goodell and Mundé 17 per cent.: Pallen 45 per cent. My investigations in the Philadelphia Hospital lead me to believe that in nearly every primipara the cervix is fissured to a greater or less depth. That under favorable circumstances, where the fissure is slight and the vagina kept clean, the greater number heal without deleterious influences, but many continue unclosed, to aggravate and render miserable the future of the patient.

As to the site of the lesion, Pallen found that out of every one hundred cases 80 would present a tear upon the left side, 15 bilateral, and 5 upon the right. Emmet also found it upon the left side most frequently. Goodell, in one hun-

dred and thirteen cases, found the tear bilateral in ninety. In forty cases in which I have noted the seat of lesion, twenty-six were bilateral, with, in the majority of cases, the deeper cleft upon the left side, five of which presented a third posterior cleft, eleven presented a left-sided cleft alone, and three a right.

We can readily comprehend why the lesion should occur more frequently to the left, when we remember that the bi-mastoid diameter, in the greater number of labors, presents to the left side.

The frequency of the lesion is attributed to the use of forceps before the uterus is fully dilated, early rupture of membranes, failing to separate adherent membranes from the cervix.

One would naturally suppose that rapid labor would be an important factor in its production, but those having the largest experience have found it occurs almost entirely as a result of protracted labor. Rapid labor only occurs when the organs are in such a condition as to be able to properly discharge their functions. Any cause tending to protract the labor will increase the danger of producing this lesion, and hence may be considered a cause.

This subject has been well discussed by Pallen, in the *British Medical Journal* for the present year. In rapid contractions, where the placenta is attached at one side of the uterus, the muscular fibre being weakened at the site of implantation, causes a sigmoid wave of expulsive force directed away from the centre of the pelvic planes, or centre of the external os. As a result of this misdirected force, a segment of the cervix becomes folded over the advancing head, and becomes lacerated, because it is below the line of expulsive force. In such cases, the tearing begins within and extends toward the os; while ordinarily it begins at the os and tears toward the uterine tissue. It is likely to occur whenever, from any cause, as irregular pelvis or malposition of child, the symmetry of contractions be diverted into lines of expulsion away from the centre of exit, and the head be driven, anteriorly, posteriorly, or laterally, to form a capsule of the cervical segment, with production of perivascular ecchymosis, rupture of capillaries, œdema and bruising of tissue, by impinging against the pelvic walls. These conditions impair the elasticity and distensibility of the cervix. One of the most frequent causes is the scleremic state following inflammation or congestion, a result of the hyperplasia. In this condition the parts undergo shrinking, atrophy, and induration of the connective tissue, with agglutination of the muscular striæ, rendering the whole substance hard, inelastic, and friable. Such a state renders the uterus slow to dilate, and it exhausts itself by repeated efforts at expulsion. The jamming of the enveloping segment against the pelvic walls bruises the already inelastic, non-distensible tissue, and increases the tendency to rupture. The osseous structures too small, or the child's head too large, deformities existing which render necessary the application of forceps, the dragging of the child through a bruised and exhausted cervix, necessarily causes tearing. It may also occur in version and head-last deliveries.

Even though the channels of exit be normal, but the uterus inert, from an excessive amount of liquor amnii, causing the power of the contractions to be lost, from being diffused over too large a surface, a failure of elasticity, or sort of paralysis, will ensue; and though the head be disengaged without accident, the shoulders are almost certain to produce laceration. Here, unless the accoucheur recognizes the condition, and by judicious and skillful management rapidly completes the labor, the accident is almost unavoidable. If, however, proper hydrostatic dilatation be followed by version or the use of the forceps, the labor would be terminated before paresis, œdema or ecchymosis ensued, and, consequently, save the woman serious injury.

When it does occur, nothing short of surgical skill rescues her from future ill health, or, perhaps, death from immediate hemorrhage or septic surgical fever. These lesions do not recover of themselves, though the majority of obstetric writers do not consider them of much importance. The laceration may, and frequently does, occur when the physician's hand is thrust into the uterus, in the operation of version. Emmet says it may result from criminal abortion.

How are we to determine that the lesion has occurred? We are not able positively to say it has occurred until after delivery. But in roomy pelves it may be suspected when there is a sudden bloody bathing of the vulva or child's head; also, when the head has been impinging against a hardened, inelastic cervix, and suddenly passes through it, as illustrated by the following case: Mrs. —, the wife of a physician, had suffered from uræmic symptoms for a week; was seen at 9 A M., November 2d, 1880, when she complained of pains of an intermittent character which had distracted her rest the greater part of the night; the uterus was dilated to admit the finger; the vertex presented with the left occiput anterior. She was given a rectal injection of forty drops of tr. opii. During the day there was a bloody dis-

charge and severe pains, but os remained undilated. Given morphiæ sulph., gr. ⅓, hypodermically. At 1 A.M., the 3d, os still undilated; at 4 A.M. wa called to find child delivered. Her husband informed me there were but two or three expulsive pains. The child was quite small, feeble, and died the following day. Her health was very slow in becoming reëstablished. A few months later the cervix was found to be lacerated bilaterally and through the posterior lip.

The symptom which causes us most strongly to suspect laceration is hemorrhage. If we find bleeding persists after the uterus has contracted, and the perineum and vestibule are untorn, we should make it a rule to assure ourselves by ocular inspection of the seat.

It is true, the finger will indicate the torn cervix, but should there be any doubt, there should be no hesitancy in placing her in a semi-prone position, retracting the perineum with Sim's speculum, cleansing the vagina of clots, and seeing the point from which the bleeding occurs. Supposing we find a rupture of the cervix; what is to be done?

Certainly good surgery would teach us to place the parts in such relation that the normal condition would be restored, and it becomes a question whether more than rest is needed to bring this about. In cases of slight laceration, union is probable, but when we remember the enlarged state of the organ, its subsequent process of involution, and that the wounded surfaces are constantly bathed with lochia, we are not surprised that in the majority of cases of severe rupture union does not take place.

The better plan would be that recommended and first practiced by M. A. Pallen, closing by wire sutures. All the conditions are favorable to its immediate performance—the vagina and vulva well dilated, the uterus easily drawn down. The sutures should be introduced and brought out a full half inch or more from the margin of the rent, remembering that we are dealing with greatly exaggerated tissue, which rapidly undergoes a retrograde process and consequently requires a deeper hold. The sutures should be twisted and cut half an inch long. The parts should be carefully watched subsequently, and if any of the wires show indications of becoming loose, they should be tightened by twisting. The sutures may remain two weeks. An antiseptic injection should be used several times daily during convalescence.

The advantages in performing the operation at once are, that it arrests hemorrhage, decreases the danger of septic fever, promotes involution, precludes the necessity of a secondary operation, and saves the patient a life of invalidism and the expense of future treatment.

When a deep laceration is allowed to remain unstitched, it will sometimes become closed, but more frequently union fails to take place. As a result of the fractured surface, or possibly the absorption of septic matter, a sort of paralysis of the capillaries occurs; the process of involution is arrested, the uterus remains large, its weight causes it to settle further down in the vagina, or possibly become retroverted, increasing the derangement of circulation. The traction upon the lips by the vagina separates them and is still further increased by pressure upon the posterior vaginal wall or floor of the pelvis. The constant motion to which the organ is subject, in respiration and exercise, breaks the granulations and keeps up the irritation.

When a woman who has had one or more children complains of leucorrhœa, menorrhagia, of greater or less degree, intercostal neuralgia, hemicrania, pains in either iliac fossa or in the back, with vesical or rectal symptoms, we have a cervical lesion, and as this is the most frequent lesion—of the cervix—in the mother, we are justified in suspecting its existence, particularly when the abdomen is free from tenderness. We can only arrive at a certain diagnosis, however, by an examination.

The convalescence of such a patient may be much retarded, having what is known as "a slow getting up," suffering at once from the symptoms we have enumerated. Others enjoy good health until lactation ceases, and the ovaries reassert themselves, when the woman finds herself an invalid.

Menorrhagia, though frequent, is not a constant symptom. In some cases the menstrual flow is diminished, and may even be absent. The cervix is found patulous, so that the finger readily enters the canal. The surfaces may be simply abraded, inflamed, angry looking, lying in contact, or widely separated, the lips hard, from inflammatory exudation, the mucous membrane everted, studded with mucous cysts and covered with granulations, or the clefts have healed over, and are the seat of cicatricial deposits.

It is sometimes difficult to determine the presence of laceration. The clefts may be completely filled with hard, dense tissue, having the feel of cartilage, the cervix larger at the extremity than above, and with its antero-posterior diameter greatly increased. Others are seen with

the cervix greatly hypertrophied, dense, covered with exuberant granulations, that bleed upon the slightest touch. Such a case may be readily mistaken for cancer.

In the spring of 1879 I was called to see Mrs. S., aged about 40, who had suffered from uterine disorder for some months; for the last three weeks she had had a continuous bloody discharge and shooting pains through the pelvis. She had lost flesh and appetite; the uterus was nodular, covered with exuberant, easily broken granulations, that bled when touched. The discharge was attended with an offensive odor. I had but little hesitancy in pronouncing it a malignant condition. Imagine my surprise, then, when it healed completely under applications of chromic acid alternated with glycerole of tannin, and disclosed five clefts.

The vaginal portion of the cervix has much to do with the maintenance of the uterus in its relative position to the other pelvic organs. Any laceration must increase the tendency to displacement. Retroversion is probably the most frequent. A peculiar form of anteflexion is sometimes seen confined to the anterior segment, which is hypertrophied and elongated, while the posterior is normal in size, or atrophied. If the laceration be one sided there is less eversion of the mucous membrane, but the uterus resting upon a sort of tripod, as the torn surfaces separate, produces a partial obliquity, by crowding the cervix to the uninjured side. Cellulitis has a similar effect by shortening the broad ligament.

Cellulitis is the most frequent complication, and is almost sure to occur when the lesion extends above the vaginal portion. Slight anterior and posterior lacerations are of but little significance, as there is but slight tendency to separation. They usually heal during convalescence, but a deep anterior sometimes extends into the bladder. The vaginal portion may close, leaving a vesico-uterine fistula.

These cases were formerly treated by caustics, as nitrate of silver, caustic potash, and the acids; by the application of the actual cautery, or amputation of the cervix; methods of treatment that resulted in the increase of cicatricial tissue and aggravated the reflex symptoms by the pressure upon the terminal fibres of the uterine nerves. The object of treatment should be, as far as possible, the restoration of the normal condition. This can only be done by freshening the surfaces and keeping them in apposition.

Some preparatory treatment is frequently necessary, particularly where there are evidences of former cellulitis or pelvic peritonitis, present inflammation of the cervix, or extensive eversion of the mucous membrane with cystic degeneration. Emmet expressly states the necessity of postponing the operation until all acute inflammatory symptoms are removed. The operation should not be done after a cellulitis or peritonitis, so long as any tenderness is present.

In performing the operation the patient is usually placed upon her left side, and the perineum retracted with a Sims speculum. Where the uterus is very movable, and vagina large, it may be done with the patient upon her back; the uterus is drawn down by a tenaculum, or volsella forceps, and transfixed from before backward by a curved needle bearing a strong silk thread. This thread is hooked down from the cervical canal, cut, and the ends tied, giving a handle for each lip. The tourniquet is now applied well above the lacerated surfaces. It may consist of a watch-spring arrangement, as used by Dr. Emmet, an ordinary wire ecraseur, or a flexible metal catheter with the end removed and a strong loop of thread passed through it, which is placed over the cervix and drawn tight, the ends tied around the rings of the catheter. I use the tourniquet in all cases, as it renders the operation bloodless, hence more agreeable and expeditious. The surfaces are now separated, and in a double tear freshened on each side, from one lip to the other, leaving a strip of mucous membrane in the centre of each, which forms the future cervical canal. This undenuded portion on each lip should correspond with that upon the opposite, and should widen toward the extremity, so as to present a trumpet shape. Great care must be observed in denudation, to remove all cicatrical tissue from the angle of the cleft. Should a wedge-shaped piece be allowed to remain, greater traction is made upon the sutures when the parts are approximated, and this mass, by pressure, arrests the circulation. Should union take place, its pressure upon the nerves included in its structure may cause reflex neuralgia.

In cases of long standing, where there is much cystic degeneration, and the lips are hypertrophied, everted, and convex, it is necessary to remove a large portion of tissue, so that the edges may be properly turned in. The cervix is sometimes lacerated in three or four places; were we to freshen each cleft, and bring them together separately, the result would most probably be failure, as the traction in opposite directions would cause the sutures to cut out. It is better to join two clefts by removing the segment between them.

In drawing down the uterus we must be gov erned by its movability. The lower surface should be freshened first, as then it will not be obscured by blood running over it. The portion to be removed is hooked up by a small tenaculum and kept on the stretch while it is being removed, which should be done by a single strip from one lip to the other. The denudation may be done with either scissors or scalpel. With either the surfaces should be made perfectly smooth and uniform in extent, the object being to bring about union by the first intention, as any granulation must result in cicatricial tissue.

In old cases the introduction of sutures is often quite difficult. The best needle for this purpose is one about an inch in length, slightly curved at the point and beveled at one side. It should be threaded with a silk loop held by a half knot. The wire suture is hooked into this loop. The first suture is introduced near the angle of the cleft; the others three lines apart, entered and brought out three lines from the margin of the freshened surfaces. The parts are cleared of foreign substances and the sutures twisted, observing care to have the freshened surfaces well covered or turned in. The sutures, cut an inch long and turned back, will give no trouble. They may be secured by shot, but are more likely to cut, leaving a ragged surface; also, more difficult to remove.

The patient should be kept in a recumbent position for two weeks. The bowels need not be constipated but should be evacuated and the urine voided upon a bed pan. After micturition a few syringefuls of warm water should be thrown into the vagina, to dilute any urine that may have passed into it. Antiseptic injections should be used daily after the first forty-eight hours. The sutures are generally removed on the seventh or eighth day, and care should be exercised not to separate the surfaces.

The patient is placed upon her left side, the cervix brought into view by Sims' speculum, the lower portion of the loop cut, and traction made downward. In this way the loop binds together the parts until it is completely withdrawn; if cut above it would separate them.

She should remain in bed a full week subsequent to the removal of the sutures. This rest promotes the union, prevents the danger of cellulitis, and helps decrease the size of the uterus.

It is necessary to exercise some caution as to what result we promise our patient; for this operation, though not a serious one, is not absolutely free from danger. Emmet has lost two cases, Dr. Hunter, of New York, one; they died from cellulitis or peritonitis. It does not always afford the relief we expect from it. It has been my own experience to have a patient suffer just as severely after a successful operation as before, much to our mutual disgust. We can, however, in all uncomplicated cases, promise complete relief. In cases of retroflexion and version it would be necessary to follow the operation by the use of a pessary, the comfortable use of which the operation greatly promotes.

It is often asked, "What effect will the operation have upon subsequent parturition?" If the cicatricial tissue is completely removed, and union secured by first intention, I cannot see why there should be any difficulty.

The last number of the *American Journal of Obstetrics* reports eight cases in which labor subsequent to the operation had not been attended by laceration.

Hospital Reports.

MEDICO-CHIRURGICAL COLLEGE.

SERVICE OF F. LE SIEURE WEIR, M.D.,
Clinical Professor of Dermatology.

(Reported by Dr. H. B. Nightingale, Chief of Clinic.)

Gentlemen:—Our clinical material being unusually abundant to-day, I shall have the opportunity of showing you cases illustrating several varieties of skin disease which I had occasion to mention in recent didactic lectures. Most of the cases are such as are met with constantly, and such being the case it behooves you to be familiar with them. The first case, which will now be brought in, is somewhat more extensive than is usually seen, and will give you an excellent idea of the disease.

Syphiloderma (tuberculosum).

Case 1.—This woman is an American, married, and 33 years of age. She tells us she was perfectly healthy up to five years ago, at which time she had been married to her present husband for one year, he being her second. At the time mentioned she noticed a small spot upon the forehead, which quickly pustulated. It was very persistent, and at last she thought to try the effect of inoculating herself elsewhere with the pus, to "see what it would do." She found out; and in doing so unconsciously settled the diagnosis. The place chosen was the shoulder, directly over the acromion process. The inoculated spot shortly gave rise to similar ones, all in the immediate locality. These tubercles, for such they are, have been present ever since, occasionally dying away for a few weeks. You here see the full-blown tubercles, while near them are others in their very incipiency; and somewhat removed are the old cicatrices. Each is coppery in color at the base, with intermingled erythema. The case is plainly syphilitic in nature. If more evidence is wanted to prove this, I may mention the presence of nocturnal pains in the bones, marked alopecia, sore gums, and a generally degen-

erated system. There is no history obtainable of a primary sore at any time. The tubercles are, as you see, covered over in part by dark scabs, and have a hard, inflamed base. Can we do anything for this? Certainly we can. To begin with, we will give her five grains of potassium iodide, with one twenty-fourth of a grain of corrosive sublimate, in half an ounce of cinnamon water, three times a day, after meals. She will take this for, say two weeks, after which she will be put on one-quarter grain doses of the protoiodide of mercury, taken thrice daily, in pill. A proper interval, however, must be allowed between the two medicines, for when they are given together biniodide and metallic mercury are the result. Locally, an ointment composed of ung. hydg. nit., ʒ iij to ung. petrolei, ʒ v, will be used about twice daily. This will be followed by a soothing ointment of benzoated oxide of zinc, containing a few drops of carbolic acid. Good results may be expected from this, and if we could keep her long enough she would obtain permanent relief; but, like all such patients, as soon as the sores heal she will leave us.

Psoriasis.

Case 2 —Miss C., American, 22 years of age. This young lady has been sent here by a medical gentleman, for advice. The case shows us a number of white or pearl colored patches, situated mostly in the neighborhood of the joints, and having a tendency to extend downward toward the hands and feet. It is quite thick here about the elbow, and being well marked, you can see the scales piled up, one above another. I would like you to observe the shape of the patches, it being one means of determining the variety of psoriasis, for that is the disease; and also the size, as another point of diagnosis. The patient states that she has had the difficulty since childhood, but that during the summer months it nearly disappears. There is no itching to speak of. Her general health is good, and the menstrual functions are performed normally, while the stomach, notwithstanding the pouring down of a good deal of medicine, remains in good condition.

We have made out the disease but not the variety. Of the latter there are a great many—far more, in fact, than there is any use for—and they greatly confuse the student. I will refer you to the text books for their description, and only mention the variety known as *nummularis*, under which this case is classed. It is so named from the patches being about the size and shape of a coin. In the present case they are about the size of a half dollar. It is a disease utterly devoid of discharge of any kind, and is, therefore, properly classed under the squamous group. Pathologically, psoriasis, otherwise known as lepra vulgaris, consists of hyperæmia of the cutis, together with hypertrophy of the papillæ and excessive cell proliferation.

The patient being of a lymphatic temperament, as are a majority of the subjects of the affection, we will place her on cod-liver oil, giving a dessertspoonful three times daily, after meals, in emulsion. The Doctor has tried chrysophanic acid with a negative result. After awhile arsenic may be given here to advantage, I think, and the most desirable form is the solid, inasmuch as Fowler's solution is too varying in strength. Locally the treatment must be judicious, for harm may easily be wrought, owing to the sensitiveness of the skin, more especially in the young. She shall be ordered a bath every night, in which from two to four ounces of sodium bicarbonate are dissolved. After remaining in for not over ten or fifteen minutes she shall be dried and thoroughly anointed with olive oil or cosmoline. This will result in softening the skin and loosening the scales. Until the scales are got rid of, no direct medication will be used, for it would not reach the seat of the disease. I think we may venture upon slight stimulation then, and will, therefore, advise the Doctor to use something like the following:—

℞. Ung. hydrarg. nit., ʒ iij
Ung. petrolei., ʒ j
Ol. olivæ, fʒ iiss
Ol. cad., fʒ j. M.
Ft. ung.
Sig.—Apply twice daily.

Eczema.

Case 3.—This man, D. M. aged 70 years, Irish by birth, is also sent by a physician. He has had an eczema of the palmar surface of the hands for about eight months, and if you examine, you will see that extending in numerous directions are large cracks, which bleed when irritated by the movements of the muscles. Surrounding the cracks the epidermis is engorged, but evidently he is much better than he was some weeks or months ago. The man's occupation is that of a dyer, and the contact of the parts with the various dyes has given rise to the disease. There are present all the symptoms which ordinarily accompany this affection, such as itching, burning, etc., together with moisture, though the latter is not very prominent now, except in the immediate neighborhood of the fissures. The presence of the fissures determines the variety, and we therefore call it eczema fissum. No treatment other than for the cracks is desired, as it is doing well enough otherwise. We will, therefore, apply pure carbolic acid to the sides of the fissures, by means of a smooth piece of wood, and ask the Doctor to repeat this once or twice, weekly, as long as necessary. A very few will suffice, however. In addition, he shall have an ointment composed of—

℞. Hydrarg. chl. mit., ʒ ss
Ung. picis., ʒ iij
Ung. petrolei, ʒ ss. M.

Sycosis.

Case 4.—A. H., aged 30 years. This young man presents himself here to day with the state of affairs which you here see. The whole surface wherever there is beard is hot, red, swollen and tense, with pustules in abundance. He has persistently shaved the parts, which has only made matters worse. Each pustule is pierced by a hair, and this is to be borne in mind, for it is one of the diagnostic points. His occupation is that of an engineer, and the sudden transition from the hot air of the engine room to the cold air without has probably been the cause. This is strengthened by his evidently anæmic condi-

tion. How do we distinguish between this affection, known as sycosis, and the parasitic affection of the same name? In a recent didactic lecture I told you that it were better to call simple inflammation of the hair follicles sycosis, and a similar disease, caused by a veget able parasite, tinea sycosis. The latter is the only disease with which it is liable to be confounded, and it shows us the eruption occurring at points not covered by hair; it does not affect the upper lip; and lastly, by means of the microscope we can detect the fungus. In the present case you see that the upper lip has not escaped, that each pustule in this situation is pierced by a hair, this being the only unshaven part. We will first give him a saline aperient and put him on tincture ferri chlor. in fifteen drop doses three times daily, in water. Locally, warm poulticing, followed by a soothing ointment of oxide of zinc or a lotion of lead water and laudanum. I do not much like the plan of laying open the pustules and tubercles, unless the case is a very severe one and does not take kindly to medication. The case before us is not one for an operation of this kind. He will be directed to let his beard grow, but keep it clipped close. Epilation does harm in these cases.

Herpes Zoster.

CASE 5.—J. S., aged 6 years. This little boy is brought to us by his mother, who wants to know what is the matter with his side. Upon examination we find a small number of minute vesicles seated upon a somewhat inflamed base, and involving not quite one-half the body from the spinal column to the median line. The vesicles here follow the course of the cutaneous nerves, which is one of the peculiarities of the disease. It is a case of shingles, or herpes zoster. Being a simple case it needs no special treatment. We will simply give him a dusting powder of subnitrate of bismuth or oleate of zinc, and have his mother protect the parts from contact with the clothing by a piece of soft muslin. He will be well in a few days.

Tinea Versicolor.

CASE 6.—W. G., aged 17 years. This young man has an affection of the skin which is very instructive. The whole front of the body is covered with brownish-yellow staining, apparently from the neck to the pubis, and the back is not much better. The discoloration also extends down the arms as far as the hands, where it takes on the appearance of little erythematous points or spots. By passing the finger over the surface you see that it is uneven and rough, and that the parts have a greasy feel. The disease has existed for two years, and first began as a small yellow spot at the epigastrium, which gradually spread until it has assumed the proportions which you now see. He says that it itches very much, and that when warm in bed this is worse. No doubt it is.

It is a case of tinea versicolor, or chloasma, as it was formerly called. It is due to the presence and growth of a vegetable parasite upon the epidermis, known as the *microsporon furfurans*. There is no danger of contagion, for its activity in this respect is very feeble. The copper color of the syphiloderm is the only disease liable to be confounded with it, and there you have the history, with, also, the long train of symptoms invariably to be met with.

He will be directed to cleanse the parts thoroughly, twice a week, with soft soap and water, after which he will apply freely, twice daily, a lotion containing from 30 to 60 grains of hyposulphite of soda to the ounce of water. After the plant is removed the lotion should still be used for a week or two, for, although apparently cured then, it will be liable to relapse. Three or four weeks ought to effect a cure.

MEDICAL SOCIETIES.

NORTHERN MEDICAL SOCIETY OF PHILADELPHIA.

Dr. Montgomery read a paper upon Laceration of the Cervix Uteri (for which see page 453.)

Dr. Croasdale asked if there was not difficulty in bringing the surfaces together when operating with the use of the tourniquet.

Dr. Beates asked what were the indications for an operation, stating that he had operated in one case of uterine megrim in which the union was complete, yet with no relief of the megrim. He stated that seventy per cent. of such cases that had been operated upon had failed to relieve this symptom. He would operate if there was menorrhagia even in a slight degree; also, in case of granular degeneration that returned after scraping. He had seen four or five cases out of twenty-five or thirty in which he would not operate. In performing the operation, he placed the stitches as near the surface as possible, including only about one-fifteenth of an inch between the wires, believing that deeper ones were more liable to cut through and loosen. He uses shot and draws them loosely; removes the sutures after nine days; has never had a failure to unite.

Dr. Hall asked if there was any account taken of the menstrual period in selecting the time for operation; also, an explanation of several fissures being found. One rupture, or, at most, two lateral ones, would relieve the strain and allow the head to pass, thus satisfying all the mechanical difficulties and precluding any more.

Dr. Collins said he had not met with an actual case of tearing of the os uteri during labor, and asked for the experience of the other obstetricians present. In performing the operation for relief he had never used the tourniquet.

Dr. Eskridge thought that these cases must be the ones referred to by the older gynecologists under the name of ulcer of the womb. The condition of ulcer he thought very rare, and mentioned that out of two hundred cases examined in one year at the Catharine Street Dispensary, not one of ulcer was found.

Dr. Walker would advise the use of the tourniquet; he had operated without and had been with Dr. Montgomery when it was used. There was a saving of some blood, greater cleanliness, and the surgeon felt in less haste. He thought there was some danger of a thrombus, but there is no record of one having been swept into the general circulation. He had seen Dr. Duer

operate with the patient placed upon the back, which required two assistants, one to support each limb; at the same time it allowed the operator to sit in a comfortable position.

Dr. Montgomery, in reply to the several gentlemen, said that he could see no danger of thrombus, as the tourniquet was not tight enough for that. The supine could have no advantage over the ordinary position of Sims, since he could be seated with the patient in either position. Regarding the time for operating, he made the interval as long as possible before the return of the menses—could usually obtain three weeks. He thought the os might be ruptured in several places at a single labor, but that multiple fissures were usually the result of several labors. He thought it important to emphasize the point of delaying the operation until all tenderness of the womb had disappeared, as one or two lives had been lost from neglect of this precaution. The ease of the diagnosis he thought to depend upon the kind of speculum used; that of Sims being the best. He had met with no difficulty in approximating the parts while using the tourniquet.

Dr. Collins exhibited some specimens of foreign bodies removed. 1st, a bit of wood, 2¼ inches long, ¼ inch in diameter, taken from the index finger of a boy who had his hand mashed. The stick was partly broken opposite the joint of the finger, so as to allow its motion. The patient was unaware of its presence. 2d, a cigarette holder 2½ inches long, ⅝ of an inch in diameter, removed from the urethra of a young man who had inserted it during a debauch, two days previously. 3d, a feather, 2 inches long, ¾ of an inch wide, expelled from the mouth during a fit of coughing. The patient was subject to a spasmodic cough, which was not relieved by the usual remedies. He had during the treatment examined the throat very carefully with the laryngoscope, and on one occasion saw as far down as the bifurcation of the trachea, without discovering anything wrong. 4th, several small calcareous bodies, $\frac{3}{16}$ of an inch in diameter, coughed up. The patient had been subject to cough for several months; was not relieved until after the expulsion of these bodies. He had examined the lungs several times, but never could detect anything wrong in either.

The calcareous bodies were referred to the committee on morbid growths.

Editorial Department.

Periscope.

Puerperal Convulsions.

At a recent meeting of the Dublin Obstetrical Society (Dublin *Journal Medical Science*) Dr. Richard Henry presented four cases of labor complicated by convulsions. After reading histories of the cases, he said: "In these four cases the distinction between true epilepsy and epileptiform convulsions is well marked, the fit in the former not returning except at the distant intervals the patient is accustomed to, and being no hindrance to recovery. In fact, no particular importance was attached to the fits in the first and fourth cases, once their true nature was apparent. Again, in the second and third cases there is marked distinction. In the second, the anasarca was general, invading the face, arms and legs, while in the third case it was confined to the ankles. In the second case the fits commenced before labor was concluded, and in the third when it was practically at an end. The second was infinitely more serious, and the question suggests itself whether the greater amount of uræmia not only brought on the fits before labor ended, but also increased their number and severity after it was concluded. The number of the fits (seven teen), the profound unconsciousness, the obsti nacy of the bowels, and the good results following the old-fashioned practice of bleeding, and, above all, the complete recovery of the patient, are features worthy of note. Again, the question arises, does the bleeding, by speedily lessening the amount of uræmia, and by emptying the blood vessels rapidly, permit the resumption of nervous energy or tone of both cerebral and sympathetic nerves, as shown by quickly returning consciousness on the one hand, and on the other, by the satisfactory motions from the bowels, as both systems seemed profoundly paralyzed by the poison? Also, are there not plethoric cases in whom convulsions might be more speedily cut short, and more safely also, by *bleeding* than by any newer method? I remember a case some years ago, where the patient was bled to forty ounces before the fits ceased; no chloroform was used and she made a good recovery. Dr. Kidd, in discussion said: The fourth case is interesting, as showing that epilepsy occurring during labor is not such a very serious affection as uræmic convulsions. That point is very conclusively established by the paper. I have myself resorted to bleeding, but not with the good results recorded by Dr. Henry. Purging is the remedy on which I chiefly rely. It is often very difficult to get the bowels to act, and in several cases in the Coombe Hospital we have not hesitated to give 20 grains of calomel, and even to add to it some croton oil. The best of our recent observers have noted the good effects of large doses of calomel in cases of uræmia from kidney disease.

Dr. More Madden said: "It appears to me impossible to discuss together with any advantage the general treatment of diseases so essentially distinct as the different forms of puerperal convulsions of which Dr. Henry's paper furnishes us with examples. For instance, the hysterical form of the disease is one requiring little or no treatment of any kind, whereas epileptiform puerperal convulsions, whether uræmic

or not, always require the most active prophylactic and remedial treatment. Still more essential is such treatment in the sthenic or apoplectiform variety of puerperal convulsions, which may be either merely a later stage and more profound degree of the last named form, or may assume its distinct apoplectiform character *ab initio*. Of the value of large purgation, counter-irritation, and cold effusion in such cases, there can be no question. As to chloroform, all the benefit I have seen from its use was to allay for the time the convulsions, and thus aid in gaining time to effect delivery, which must always be a primary consideration in the treatment of these cases. As to chloral and the many remedies which I have seen tried, all I can say is, that in any grave case of true puerperal convulsions time is far too precious to be wasted in trying experiments with such doubtful agents when life is hanging in the scale. In such cases, and I now speak of sthenic or apoplectiform convulsions, bleeding is the only reliable remedy, and I have no doubt that to save the life of a plethoric patient we must still bleed as freely as our ancestors did a hundred years ago, or else the patient will die, as such patients did during the interval of time when bleeding was driven as completely out of midwifery as it was out of every other branch of medical practice."

Dr. Purefoy said: "I have seen a good many cases of puerperal convulsions, and the only case of recovery was one in which the woman was freely bled. I saw a case of a primipara in puerperal convulsions which appeared perfectly hopeless; she was saved by free bleeding."

Dr. Atthill said: "I have been in the habit of bleeding occasionally in convulsions, and have never seen it do harm. Sometimes it seemed to do no good, while, on several occasions, I have seen excellent results follow. Chloroform sometimes stops convulsions; it frequently retards them, but it is not curative. Chloroform is only an expedient to procure the cessation of convulsions till the other treatment acts."

The Chairman concluded the discussion by saying: "I think we ought to keep the different forms of convulsions separate in treatment. The treatment of ordinary uræmic puerperal convulsions is, I think, much the same as of convulsions occurring in Bright's disease. That apoplectic convulsions which depend on anything like effusion into the brain ought to be treated according to the ordinary principles for the treatment of apoplexy, is also, I think, obvious. Uræmic convulsions may, by causing increased tension of the blood vessels of the brain, lead to rupture and consequent apoplectic convulsions; and one object of treatment should, therefore, be to quiet the convulsions. Bleeding lessens the tension; but, on the other hand, it renders the blood more watery, and so increases the probability of the convulsions being repeated. It is obvious, therefore, that all forms of puerperal convulsions cannot be classed together as though they depended on the same cause. Morphia is used to prevent a convulsion taking place. As regards curative treatment, we should separate convulsions occurring before, during, and after labor. As long as there is a child in the uterus, our efforts should be principally directed to removing it; and until that is done it would, I think, be premature to bleed the woman."

Rupture of Bladder.

In the *Lancet*, Dr. Padley records the following case: Towards the end of last June I was called to see Mr. J. S., who had a short time previously consulted me for a syphilitic perforating ulcer of the soft palate. He was suffering from most intense pain in the abdomen, a little above the pubes, attended by sharp rigors and vomiting, and other symptoms of severe pyrexia, which recurred intermittingly from time to time. There was no distention in this region, but some induration and redness and subsequent swelling. The pain, though relieved by opiates, fomentations, etc., continued very acute, and the redness and induration spread rapidly over the abdomen toward the left side. The case was one of severe and extensive phlegmonous erysipelas. There were rapid suppuration and sloughing of the parts, into which I made a free incision, and through which a large quantity of ichorous, offensive discharge freely escaped. Notwithstanding this, the disease spread up the side of the abdomen and chest nearly to the axilla, near which and in the intermediate space other incisions were made and drainage-tubes introduced, the wounds being dressed with carbolic acid lotion. The greatest portion of the subcutaneous areolar tissue of the region, however, sloughed, and had to be removed as it became sufficiently detached. The discharge was immense, and the constitutional symptoms, as may be supposed, were of a very grave character. A few days before my return home, after a short absence, while the patient was straining to empty the bladder, a gush of fluid, "about a tumblerful," suddenly spouted out in a free stream from the wound above the pubes. The urine, for such the fluid proved to be, continued for some weeks to be freely discharged through the orifice, and a little continued to escape occasionally, sometimes at long intervals, when there was more than the usual obstruction to its flow through the urethra, as from mucus, etc., until within a few weeks of his leaving this neighborhood. After the sloughs were detached, the extensive chasms left granulated favorably and cicatrized, a sinus evidently remaining in communication with the bladder, and the patient completely and rapidly recovered his health and strength. An attack of acute pneumonia threw him back for a time, but from this he also made a favorable recovery.

In reply to my earlier inquiries, he at first stated that he had had but little difficulty in emptying the bladder, though the stream of urine was rather small and required more effort to void than formerly, yet not more than had been the case for a long time previously, the bladder being fairly emptied and the urine generally clear. On passing an instrument, however, I found a very close stricture extending through the greatest portion of the canal—at first admitting only a filiform, and afterwards a No. 1, bougie—which no doubt caused greater difficulty in micturition than he admitted, owing, as he afterwards confessed, to his dread of instruments, having formerly suffered much from their use. There

was, he affirmed, never sufficient retention to cause him much inconvenience, and I never found the bladder distended. Up to this attack no pain in this region was complained of.

Such being the facts of the case, what was the immediate cause of the rupture and the discharge of urine? There were, of course, two factors in operation: the sloughing of the abdominal wall and the straining efforts in micturition. Did the perforation of the bladder and consequent extravasation of urine into the abdominal areolar tissue take place in the first instance and set up the cellulitis and sloughing, which afterwards led to the free escape of urine, the pelvic cavity having been protected, and further extravasation prevented, by adhesions around the orifice, a fistulous opening being thus formed? Or were the cellulitis and its consequences, arising from other causes, the primary condition? There can, I think, be little doubt that the first view is the correct one. If so, what caused the rupture? Was it the result of (1) distention and straining, the mucous coat of the bladder having, perhaps, become sacculated and thinned, or even having formed a hernia through the muscular coat, due to the daily repeated efforts to empty the viscus through so small a channel, extending over a very long period of time, and, under a final effort, giving way? or (2) a chronic ulcer leading to perforation under similar conditions? The facts that the patient had at no period suffered any inconvenience from distention of the bladder, and that when I was first called to see him there was no evidence whatever of any such distention, preclude, I think, the former idea; besides which there is, as far as I am aware, no recorded instance of the bladder having been ruptured above the pubes by the mere straining efforts of micturition unaccompanied by some kind of violence. In the only two cases quoted in the leading article, where this accident appears to have been caused by violent action of the abdominal muscles, the rent was found in the back part of the bladder, and in distention from stricture of the urethra the membranous portion of that canal usually first gives way. Besides a case of Mr. Harrison's, referred to in the article, an instance has been recently given by Dr. Call (*Lancet*, Dec. 10th), in which rupture from the latter cause must have occurred in the lower and back part of the bladder, the gush of urine having taken place through the anus. What part gave way in Mr. Harrison's case is not mentioned.

The second explanation, namely, that there was perforation through a chronic ulcer, appears the more probable one. If this were the case, the ulcer must, of course, have been in the anterior wall of the bladder, near the apex; its formation having probably arisen from, or been favored by, the patient's constitutional (syphilitic) cachexia, co-existing with prolonged, severe straining. Adhesions having slowly formed under its influence, between the bladder at that part and the abdominal wall, just above the pubes, thus preventing any escape of fluid into the pelvis, a strong effort in micturition must have finally caused the rupture, and the extravasation of urine into the areolar tissue, with the consequences which followed. By the time the sloughs had separated, a wall of lymph having become organized opposite the perforation, further extravasation was prevented. That this view of the occurrence is the right one is strengthened by the light thrown upon it by a case of Mr. Bartleet's, in the General Hospital, Birmingham, an account of which appeared in the *Lancet* (vol. i, 1876), of which the following is a brief epitome: The patient, an engineer, aged fifty-three, "had always enjoyed excellent health, and followed his occupation uninterruptedly." On stooping, suddenly and rapidly, to pick up a bar of iron, he was seized with severe pain at the lower part of the abdomen, followed by inability to pass his urine, which had to be drawn off by a catheter, the point of which, being brought into contact with the upper part of the bladder when the handle was depressed, occasioned very acute pain. He died on the eighth day after his first attack, with obscure symptoms of deep-seated peritonitis, the symptoms generally having "appeared to point to an acute strangulation of the intestines," for which the patient was at first carefully examined, rather than to the state of things discovered after death. The autopsy revealed a large quantity of solid lymph matting the organs of the pelvis together, especially between the ileum and bladder, about an inch from its apex; and at this part of the bladder, on its posterior aspect, an ulcer was discovered, exactly resembling chronic gastric ulcer. "The ulcer obviously dated further back than the present illness, and had apparently gone through all its stages without any symptoms, and while the patient continued to follow his accustomed occupation." The act of stooping was considered to have caused a slight laceration in the adhesions between the ileum and bladder, which allowed a little urine to be discharged into the peritoneal cavity. The absence of any symptoms of diseased bladder was remarkable, both in this case and in the one I have narrated; the movement to raise the iron bar having been obviously the immediate cause of the "slight laceration" in the one case, and the effort in micturition that of the rupture in the other.

Syphilitic Diseases of the Lachrymal Apparatus.

Syphilitic lesions of the lachrymal gland, of the lachrymal caruncles, and of the lachrymal passages—all, except the latter, of uncommon occurrence—are treated of by Dr. Charles S. Bull, Surgeon to the New York Eye and Ear Infirmary, in the New York *Medical Journal and Obstetrical Review* for April, 1882. Dr. Bull gives a concise summary of the meagre literature of the subject, but his remarks are mostly from a clinical point of view. He alludes to a case of affection of the lachrymal gland in his own practice, in which the organ became inflamed in consequence of extension from an orbital periostitis. The entire contents of the orbit having been removed, to relieve the excessive pain, the gland was found generally enlarged, the hypertrophy being mainly due, however, to an increase of the connective tissue elements rather than of the proper glandular structure. Two cases of gummy infiltration of the caruncles, published by Dr. R. W. Taylor, being the first on record, are quoted

in detail, on account of their rarity. Osteo-periostitis gummosa of the lachrymo-nasal canal has not been observed by the author, but Panas, Galezowski, and Larebière are quoted as mentioning its occurrence. Under the head of treatment, the following advice in regard to inflammation of the sac is noteworthy: If the inflammatory action is severe, leading to the secretion of a glairy mucus or muco-pus, with a swelling over the seat of the sac, and there is good reason for suspecting a stricture of the duct, from whatever local cause, in the nose, do not resort to operative interference until internal medication has been tried faithfully. Ophthalmic surgeons are too prone to slit up the canaliculi and incise a stricture of the nasal duct, in cases of syphilitic origin, deeming medical treatment useless in such cases, before even giving it a trial. The use of mercury here must be prompt, and its effect must be rapidly produced, or the disease may extend from the lining of the canal to the bony walls. An excellent method of administering mercury in these cases is to use two drachms of mercurial ointment, by inunction, upon the inner aspect of the arm or side of the chest, and at the same time give the mild chloride internally, in small doses every hour or two, carefully watching for the first symptoms of the action of the drug. In many cases a beneficial effect will be observed on the third or fourth day, and then the mercury may be either entirely discontinued, or given in smaller doses at longer intervals. In many cases complete recovery follows such a course of treatment; all signs of inflammation and obstruction in the duct disappear, and its patency is restored without any incision or probing.

Removal of Benign Tumors of Breast Without Mutilation.

Professor T. Gaillard Thomas, Surgeon to the New York State Woman's Hospital, contributes to the April number of the "New York *Medical Journal and Obstetrical Review*," a paper in which he expresses himself in favor of removing benign tumors of the breast as a rule, because the mere presence of a tumor in the breast usually renders the patient apprehensive, nervous, and often gloomy, while, with our present improved methods of operating, the patient is exposed to slight risks, the danger of growth of the tumor is removed, and with this disappears at the same time that of the subsequent degeneration of a benign into a malignant growth. If, in addition to these advantages, we can add the avoidance of all mutilation to the person, we have strong grounds for departing from the practice of non-interference. The method of operation described Dr. Thomas has practiced thus far in a dozen cases. He distinctly states that it is entirely inappropriate for tumors of malignant character, and that it is applicable neither to very large nor to very small benign growths, being insufficient for the former and unnecessarily radical in its character for the latter. The growths for the removal of which he has resorted to it have been fibromata, lipomata, cysts, and adenomata, and have varied in size from that of a hen's egg to that of a duck's egg or a little larger. The operation is thus performed: The patient standing erect and the mamma being completely exposed, a semicircular line is drawn, with pen and ink, exactly in the fold which is created by the fall of the organ upon the thorax. This line encircles the lower half of the breast at its junction with the trunk. As soon as it has dried the patient is anæsthetized, and with the bistoury the skin and areolar tissue are cut through, the knife exactly following the ink-line until the thoracic muscles are reached. From these the mamma is now dissected away until the line of dissection represents the chord of an arc extending from extremity to extremity of the semicircular incision. The lower half of the mamma which is now dissected off is, after ligation of all bleeding vessels, turned upward by an assistant and laid upon the chest walls just below the clavicle. An incision is then made upon the tumor from underneath, by the bistoury, a pair of short volsella forceps is firmly fixed into it, and, while traction is made with it, its connections are snipped with scissors, the body of the tumor being closely adhered to in this process, and the growth is removed. All hemorrhage is then checked, and the breast is put back into its original position. Its outer or cutaneous surface is entirely uninjured, and the only alteration consists in a cavity at the former situation of the tumor. A glass tube with small holes at its upper extremity and along its sides, about three inches in length and of about the size of a No. 10 urethral sound, is then passed into this cavity, between the lips of the incision, and its lower extremity is fixed to the thoracic walls by India-rubber adhesive plaster, and the line of incision is closed with interrupted suture. In doing this, to avoid cicatrices as much as possible, very small round sewing-needles are employed; these are inserted as near as possible to the edges of the incision, and carry the finest Chinese silk. After enough of them have been employed to bring the lips of the wound into accurate contact, the line of incision is covered with gutta-percha and collodion, and the ordinary antiseptic dressing is applied. If the glass drainage tube acts perfectly, there is no offensive odor to the discharge, and the temperature does not rise above 100°; the tube is in no way interfered with until the ninth day, when the stitches are removed. If, on the other hand, the tube does not appear to perform its function satisfactorily, it is manipulated so as to cause it to drain all parts of the cavity, and warm carbolized water is freely injected through it every eight hours. On the ninth day, when the stitches are removed, the tube is removed likewise.

External Biliary Fistula.

Dr. J. M. Booth thus writes to the *Lancet*:—

The following case, which recently came under my observation, is, by reason of its somewhat rare occurrence, worthy of being recorded:—

The patient, a lady aged seventy-seven, had for ten years suffered from well marked attacks of hepatic colic; and, until three years ago, these occurred at intervals of a few weeks. Toward the end of September, 1878, I attended her

during an unusually severe attack, which lasted for several days. The attack was accompanied by retching and jaundice, but, though the stools were repeatedly searched, no gall-stones were found. Since then she has been entirely free from these seizures, only complaining from time to time of slight pain or uneasiness in the right hypochondrium. In June, 1881, a painful swelling appeared on the right side, which remained some time before it became red and burst, giving exit to a scanty yellowish discharge. Save its persistence, she noticed nothing unusual, until, one night toward the end of December, while preparing to retire, she discovered a hard, black point protruding from the orifice of the wound. As it hurt her on being touched, she had recourse to a hair-pin, with which, after one or two vain attempts, she succeeded in dislodging a hard, black body, about the size of a large pea. Next day two concretions of a similar size were passed.

On calling, I found the objects to be medium-sized gall-stones, about a quarter of an inch in diameter. On examination of the abdomen a depression of the integument was noted round a small wound about a quarter of an inch in breadth, situated on the right side, nearly midway between the umbilicus and the crest of the ilium. A thick, indurated band, of about an inch in breadth, could be felt deeply through the abdominal wall, passing up toward the gall-bladder until it was lost over the site of that organ at the margin of the costal cartilage. A scanty sero-purulent discharge, slightly tinged with bile, continued to ooze from the opening. Several more gall-stones have since been extruded, varying in size from that of a millet-seed to that of a pea. Further than this there is nothing worthy of remark, save that the formation of the fistula and the appearance of the calculi explain the abrupt leave-taking (now three years since) of the patient's periodic and painful visitant.

Reviews and Book Notices.

BOOK NOTICES.

A Treatise on the Science and Practice of Medicine; or the Pathology and Therapeutics of Internal Diseases. By Alonzo B. Palmer, M.D., LL.D., Professor of Pathology and Practice of Medicine in the University of Michigan, etc., etc. pp. 903. New York: G. P. Putnam's Sons, 1882. Price in cloth $5.00; in leather $6.00.

This volume has been prepared with the view of filling a void in medical literature which the author believes to exist, namely, a work on Practice of Medicine and Therapeutics viewed from an American standpoint. It has been stated that climatic causes so influence disease and remedies, that they will assume different phases and present varying degrees of potency in different countries. Believing this to be so, Dr. Palmer has described them as he finds them after a long experience in our own country; which feature alone will make his book a valuable addition to every physician's library.

Lectures on Venereal Diseases. By W. F. Glenn, M.D., Professor of Anatomy and Venereal Diseases in the Medical Department of the University of Tennessee, etc., etc. pp. 259. Nashville, Tenn.: Wheeler & Osborn, Printers, 20 N. Cherry St. 1881.

This a very good book and well worth reading. It consists of a series of lectures delivered on venereal diseases by the author. He assures his hearers of the truth of the comforting doctrine of the curability of syphilis, and makes some very sensible and practical remarks on the period that should elapse between the contraction of the disease and marriage. Syphili-phobia (the dread of syphilis) is a far worse disease to contend with than syphilis, for we can cure the latter, but the former is hard to remove from the mind. We would wish for more space to more fully notice this really good book. The presswork, also, is excellent, type large and clear, though the paper is not so good, but this makes no difference when the material printed on it is so excellent.

Chronic Bronchitis; its Forms and Treatment. By J. Milner Fothergill, M.D. With numerous illustrations. pp. 158. Price $1.50. New York: G. P. Putnam's Sons. 1882.

This book, while intended for practitioners, is designed especially for those about commencing practice. A great consideration in all books is that they may be prepared so as to make pleasant as well as instructive reading. Dr. Fothergill possesses this happy faculty in a marked degree. When he writes he always tells something new, and he does so in easy and attractive language. It must be remembered by authors that all men do not possess an equal power of comprehension. That which may be easily grasped by some minds will prove but unintelligible jargon to others. This author so writes that what he means to convey can be easily comprehended by all, thus making his book a very valuable one.

Physical Education; or, the Health Laws of Nature. By Felix L. Oswald, M.D. pp. 257. New York: D. Appleton & Co. 1882.

Dr. Oswald has written some excellent articles on this subject, and his book is a very good one. He discusses in a sensible and intelligible manner the various laws for the preservation of health, and clearly points out the penalty of their disregard. His language and style are excellent. We are constrained, however, to criticise the tendency he exhibits, more especially in the introductory chapter, to bring religion into a work on hygiene. There is a place for everything, and this is hardly the proper place to discuss religion.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

IMPRESSIONS.

The force or power of impressions is as yet an imperfectly understood factor in physiology or pathology. The old story is familiar to all, of the convicted criminal, who was placed in a bath-tub, and being blindfolded was told that he was to be bled to death. A shower bath was so arranged that the water fell on and trickled from his wrist in the water below. Imagining that he was in reality bleeding to death, though in truth no wound had been made on his body, this unfortunate succumbed, and finally died, merely through an impression, or the force of imagination. It was recently reported that a man who had been vaccinated was subsequently informed that the person from whom the vaccine virus was derived was crazy; he brooded over this fact and finally became crazy himself.

The most remarkable case, however, recently occurred in our city. A woman aged fifty-eight, in apparently good health, suddenly died; her sister, aged fifty-six, was so impressed that she died in a few minutes, and to cap the climax, a third sister, aged fifty-two, who was called on the death of the other two, suddenly died, all within half an hour. Of course, it is most likely that all of these women, who were very fleshy, had some heart trouble, but still, allowing this, it would seem that *impression* must have had much to do with the sudden deaths. It is, to say the least, an interesting field of observation, and one in which much is yet to be learned, and we desire to direct thought in this direction. We would be glad to have our readers furnish us their experience on this subject.

AMERICAN MEDICAL ASSOCIATION.

In a short time this representative body of American Physicians will convene in annual session. It may do no good, but still we will take this occasion to give a little advice. It has been reported that Professor GROSS said of the last annual meeting, in Richmond, that while socially it was a success, professionally it was a failure. We have considered that the form and method of the meetings of the State and American Medical Societies was fundamentally wrong. The system of reading papers we can conceive to be of no good, further than to advertise the readers thereof, while they consume much valuable time. It would seem to us much better for our representative men to annually assemble and openly perform two functions, for which they are supposed to meet:—

1st. Social enjoyment.

2d. To enact rules for the government of the profession.

The papers, to which but few listen, could be given much more publicity in the columns of journals, while, by dispensing with the time consumed in their reading, much more time would be allowed for the transaction of business that would prove of real benefit to the profession, while more time would also be allowed for amusement and recreation, which our hard-worked brethren so much need. This hint may, we trust, be of value to those of our readers who may be delegates to the next meeting of the American Medical Association.

"DIAMOND CUT DIAMOND."

The recent action of the New York State Medical Society concerning homœopaths has been commented upon from various sources, we are glad to say; but the most *severe* thrust has been inflicted by the homœopaths themselves. At a recent meeting of the Homœopathic Medical Society of Lancaster county, the following resolution was unanimously adopted:—

"*Resolved*, That it is the sense of this meeting, that since the practice of homœopathy has established for itself an honorable position in the estimation of the community, against all the opposing forces that the Old School could bring to bear against it, there is no advantage or prestige to be derived by homœopathic physicians in consulting with *allopaths*, and, therefore, the recent action of the *Allopathic* Medical Society of the State of New York, in resolving in future to consult with them, was entirely gratuitous."

The leaders of this movement in New York have ample reason to feel uncomfortable. In their own school they are almost universally condemned; by homœopaths they are ridiculed; but few, outside of their own clique, approve of their action; the *best* members of the profession uniting in the openly expressed hope that the innovating society shall be debarred from participation in the deliberations of the American Medical Association. The point, however, upon which we wish particularly to dwell, is the fact, the degrading fact, to those who engineered the move, that, far from feeling flattered, the homœopaths really ridicule, and laugh in their sleeve at, the action of the notorious *few* who have sacrificed their consciences to—well, to what?

Notes and Comments.

Ammonia Poisoning.

Dr. A. A. Browne reports the following case in the *Canada Medical and Surgical Journal*:—R. W., aged 54, had been drinking heavily for two weeks, and on Sunday evening, Feb 5th, 1882, he took, by mistake, a draught of strong liquor ammoniæ. In a few minutes, when he had discovered his mistake, he fell insensible on the floor. His brother made him swallow some milk, with considerable difficulty. Previous to the accident, he had taken two plates of strong soup. Free emesis was procured, after which he appeared rather better. The vomited matter smelt strongly of ammonia, and contained some blood. Voice husky, but no dyspnœa. At 10 P.M. he was very weak; pulse 130 and weak. He vomited every fifteen or twenty minutes, and the vomited matter was almost pure blood, partly in clots and partly fluid. Pain in the epigastrium was relieved for a few minutes after vomiting, but soon returned. Features pinched, surface generally cool and covered by a clammy sweat. Urine not suppressed. He constantly hawked and endeavored to clear his throat, but the voice, though husky, was not lost. Respiration not impeded. He remained in this condition until about 7 A.M., when the hemorrhage ceased and the vomiting became less frequent. During the day he remained in much the same condition, constantly hawking and unable to retain fluids, the smallest mouthful of water bringing on vomiting almost immediately. He complained of pain on the right side of the chest. Pulse very weak and rapid. Toward evening he became delirious and remained so all night. The next day his condition remained much the same; some delirium, but less noisy. Had morphia, gr. ss, and liquor atropiæ, ℥ij, hypodermically, which gave him a comparatively good night's rest. Next morning (February 8th) he seemed easier and much more comfortable. Pulse still very weak; quite rational; cannot retain anything on his stomach; hawks and spits a great deal, and occasionally, but rarely, vomits. In the evening he was much weaker, but sensible, and spoke intelligently of his case, expressing the conviction that he would not recover, and that the mucous membrane of his œsophagus and stomach were sloughing. His opinion seemed to be justified by the odor of what he hawked up, which was exceedingly offensive. Abdomen very much swollen and tympanitic, but little, if any, tenderness. Bowels move involuntarily. His condition remained much the same until he died, of exhaustion, at 4.30 P.M. on Thursday, February 9th, about 94 hours after taking his fatal dose. He was quite sensible until about a quarter of an hour before death.

Urine of Acute Pneumonia.

At a recent meeting of the Medical Society of the College of Physicians (Dublin *Journal Medical Science*), Dr. Walter Smith made a communication relative to a peculiarity observed in the urine of a patient suffering from acute pneumonia. A young gentleman, aged 22, not previously very robust, caught cold. He was seized with rigors, headache, and vomiting, and the temperature ran up to 105°. He complained of intense pain over

præcordial region. On the fifth day the physical signs were detected, of early consolidation, in the base of the left lung. The other lung became involved, and the young man died without ever rallying. Some of the urine passed on the fifth and sixth days was examined. That of the fifth was very turbid with lithates; that of the sixth was nearly clear. Each specimen examined was bright colored and acid; chlorides markedly deficient.

1. *Serum albumen.*—Tested by the usual methods, a very moderate amount could be precipitated; no distinct flocculi.

2. *Serum globulin.*—Saturation of the urine with sulphate of magnesium threw down an abundant precipitate of globulin.

3. The urine, freed from albumen, yielded *an opaque white precipitate with tannic acid*, and also with phospho-tungstic acid, and it was rendered turbid by alcohol. The tannic precipitate dissolved by heat, and was re-precipitated on cooling. These reactions suggested the presence of peptone; but, since the urine, when freed from mucus (by acetate of lead), and albumen (by precipitation along with basis acetate of iron), yielded no color with Millon's test, and failed to give the xantho-proteic reaction, the presence of any albuminoid seems to be negatived. Moreover, all attempts to get the characteristic biuret reaction for peptone ended in failure. The patient had been treated with sulphate of quinia, but direct testing of the urine for that alkaloid gave a negative result. This case elicited some discussion, but without any conclusion as to the nature of the precipitate.

The Chairman (J. W. Moore, M.D.) remarked that the outcome of the case, from a clinical standpoint, was that it afforded another proof that pneumonia is an essential, continued fever, manifesting itself, in connection with the lungs, only after a lapse of a certain period of invasion. In fact, the lesion of the lungs was analogous to the condition of the intestines in typhoid fever, or to the condition of the skin in the exanthemata or eruptive fevers.

Iodoform for Soft Chancres

In the *British Medical Journal*, Dr. Walter Whitehead says that iodoform appears to be one of the most efficacious drugs in the treatment of the syphilitic non-infecting soft sore, when not unduly inflamed. It has, however, the unfortunate counterbalancing disadvantage of attaching to the patient the liability of unenviable suspicion, the public having become keenly alive to its distinctive and penetrating odor, and having also acquired an appreciative knowledge of the principal purpose for which the drug is most frequently used. He has succeeded, he thinks, in obviating this objectionable feature, without, apparently, sacrificing any of the therapeutic advantages of the drug, by using it in the following manner: He first very carefully cleanses and dries the sores, by means of little pledgets of bibulous paper, and then, by means of a camel's hair pencil, applies freely over the surface of the sores a solution of iodoform in ether. The ether rapidly evaporates, and leaves the iodoform uniformly spread in an impalpable powder over the sores. To insure a free application, the latter part of the process may be repeated and allowed to dry. When perfectly dry, each sore is given a coating of collodion, which is allowed to overlap, about a quarter of an inch, the area of each sore. Before the collodion has had time to dry, a pinch of absorbent cotton wool is placed on each patch, as a protection against the rough contact of clothing. This dressing is allowed to remain undisturbed for twenty-four hours, when the firm film which forms may be gently removed and a fresh coating applied. This treatment is continued day by day until all the sores have quite healed. He has found that a piece of gold beater's skin may be substituted for the collodion after the application of the iodoform. This process will suppress the odor, while a further advantage will be gained in the protection afforded by the collodion against auto-inoculation, and also against the risk of contagion from others coming in contact with the sores.

Anatomy, Physiology, and Pathology of the Blood Corpuscles.

Dr. Alexander Duane, of New York, concludes his article upon this subject, in the April number of the New York *Medical Journal and Obstetrical Review*. The article as a whole embraces a historical and critical review of the part played by the corpuscular elements of the blood under normal and pathological conditions. For the red corpuscles the author proposes the term "erythrocytes." He thinks that Hewson's idea, that these corpuscles are spherical sacs, containing a central globule of uncolored substance, although certainly false in the majority of cases, is not indefensible, the appearance of a central spot being due, perhaps, in some cases, as Arndt conjectures, to a residual granule, a relic of those that, according to the latter's hypothesis, once constituted the whole corpuscle. The criticism

is suggested that the means employed by Hayem to demonstrate his "hæmatoblasts" are just the ones that produce disintegration and decolorization of the red corpuscles, resulting in appearances closely resembling what Hayem describes. Norris' colorless, biconcave, discoid forms seem open, Dr. Duane thinks, to a similar objection. Malassez's modification of Gower's hæmatocytometer, does away with one source of inaccuracy in the use of the instrument, since the depth of cell can always be adjusted to exactly 0·2 mm. The author differs with Obrastzow, Arndt, Norris, Flint, and others, in the conviction that nucleation of the white corpuscles is a normal condition, and not attributable to post-mortem coagulation of granular "nuclear matter"—the chief reason for his dissent being that nucleated corpuscles are observed in the vessels of living animals. The erythrocyte of the adult cannot be said to be capable, as a rule, of amœboid movement or of division, although such may be the case under morbid conditions. The remainder of the paper, which does not readily admit of a synopsis, includes a discussion of the formation and destruction of the corpuscular elements, the part taken by them in physiology, and a consideration of certain pathological conditions, notably anæmia, chlorosis, and leucocythæmia.

Treatment of Diphtheria.

In the *British Medical Journal*, Dr. H. Cripps Lawrence thus writes: The following combination of the glycerols of tannin and carbolic acid has proved itself, during a considerable experience of diphtheria and scarlet fever, a highly efficient application in my hands, viz:—

℞. Glycerini acidi tannici, ℥ vij
Glycerini acidi carbol., ℥ j. M.

In the application of glycerine as an absorbent, it is of practical importance that a small proportion of water should be added to it. In order to secure this, a sufficiency of glycerine should be placed in a saucer, and a throat brush dipped in water should first be stirred into the glycerine before applying it to the throat and fauces. The combination above mentioned has been found practically the most efficient proportion for securing the necessary astringent and antiseptic results, without irritation. An application, twice or at most thrice, in the twenty-four hours, secures the utmost benefit the remedy affords. It is seldom that any additional local remedies are required, but it is wise to precede the application of the glycerols with gargling the fauces and washing out the mouth with a solution of permanganate of potash and water, and to use the sulphurous acid spray, the double advantage that follows being that the fauces are the better prepared to benefit from the glycerine, and that the safety of the practitioner is increased in the event of the patient expectorating any false membrane during the act of swabbing. To further increase the safety of the medical attendant, a glass screen placed between him and the patient will afford protection, without limiting the efficicency of the procedure.

Congenital Fistulæ in the Sacral Region.

At a recent séance of the Soc. de Chirurgie, M. Terillon said that he had observed three cases where such fistulæ existed. The first, a man 35 years of age, had from birth a fistula over the sacrum, just between the upper and inner borders of the gluteal masses. This fistula extended to a depth of three centimeters, and gave issue to a liquid containing fat and epithelial detritus. Around this fistula were several others which had supervened on abscesses; there appeared to be no bone lesions. After ablation with the scalpel histological examination demonstrated that the fistulous passage was formed of epidermic tissue.

In the two other cases reported by M. Terillon, the situation and character of the fistula were identical with the one just considered.

These subcutaneous congenital fistulæ are evidently malformations. But what is their signification? Are they cases of spina-bifida in its most simple form? Or is there a retardation in the junction of the two borders of the vertebral to which the term "posterior umbilici" has been applied? M. Terillon inclines toward the latter hypothesis, as there is absence of bone lesions, and also on account of the little depression sometimes observed in infants at this point.

M. Desprès has observed one such case, and adopts fully the same theory regarding their production.

M. Gueniot has remarked the depression at the point spoken of by M. Terillon, in several children.

Primary Epithelioma of the Tonsil.

Dr. D. Bryson Delavan, of New York, relates a case of primary epithelioma of the tonsil, in the New York *Medical Journal and Obstetrical Review*. Cancer of the pharynx, he remarks, although a somewhat rare affection, is one fraught with such serious results that no opportunity for investigating its nature or devising

means for its relief should be lost. That the tonsil should be a favorite point of departure for malignant disease seems not unnatural, when the anatomical position and structure of that organ are considered. The very qualities, however, which render it liable to attack, afford, on the other hand, the greatest possible measure of hope for a favorable prognosis. For, if a diagnosis could be made before the disease had involved the surrounding tissues, the gland might, in most cases, be extirpated with comparative ease, and by the natural passages, thus avoiding the formidable operation by external incision and the almost certain recurrence of the trouble. The paper concludes with a bibliography of the subject.

Treatment of Scrofulous Ulcers of the Cornea.

This is a form of keratitis which often comes under the care of the general practitioner, and as injudicious treatment may lead to the formation of opaque cicatrices, the following recommendations regarding treatment, made by M. Dehenne in *Le Progrès Médical*, may prove of service:—

1st. Instill daily into the eye four or five drops of the following collyrium:—

℞. Atropiæ sulphat (neutral), gr. j
Aquæ destillat., f℥ iiss. M.

2d. Abstain from every form of metallic collyrium, which often leave indelible marks, veritable metallic leucomata. Do not use any collyrium containing eserine, for affections of the cornea are frequently accompanied by iritis, and there would be danger of formation of posterior synechiæ.

3d. Each evening insert between the eyelids, with a small camel's hair pencil, a portion, about as large as a pea, of the following unguent:—

℞. Hydrarg. oxid. flav., gr. xv
Ung. petrolei, ℥ ss. M.

4th. Apply four times daily over the eye compresses soaked in warm chamomile tea.

5th. Administer a tablespoonful of cod-liver oil every morning.

Laryngeal Electrization.

The *Lancet* says that Rossbach has endeavored to discover whether the nerves and muscles of the human larynx can be excited directly by electrical stimulation applied through the skin, and his experiments enable him, he believes, to give an affirmative assurance. An individual was selected, tolerant of laryngoscopic examination, and a knob-shaped, moist electrode was placed midway between the larynx and the sternum, in front of the anterior edge of the sterno-mastoid, being pressed as deeply in as could be without causing much pain. The other electrode was placed in some indifferent situation on the back of the hand. With this arrangement, whenever an opening or closing shock was sent between the poles, on the side on which the electrode was placed in the neck, a distinct contraction could be observed. The vocal cord moved inward in its whole extent, together with the arytenoid cartilage. The closure contraction was the strongest when the cathode, the opening contraction when the anode, was placed on the neck. Immediately after the stimulation a movement of swallowing occurred, which rendered further observation impossible. If the stimulation was made while a note was being uttered, the effect was to increase the pitch without interrupting the sound. The effect is ascribed to stimulation of the recurrent laryngeal nerve.

Experiments with faradization yielded the following conclusions: The passage of a strong current transversely through the larynx, an electrode being placed on each side of the thyroid cartilage, had no effect on the vocal cords or on the arytenoid cartilages. The free upper edge of the epiglottis was drawn forward and its lower part backward. The aryteno-epiglottidean folds were moved inward, together with the false vocal cords. If one electrode was placed on the side of the larynx and the other on an independent place, the effect was the same, but was confined to one side. A slight movement of the vocal cord was produced by an attempt to faradize the recurrent laryngeal nerve of one side, and the effect was still more marked if an electrode was placed over each recurrent laryngeal, a distinct tremor of the arytenoid cartilages being produced. Hence, Rossbach concludes that, in addition to the reflex effect of a painful cutaneous stimulation and to the effect on the larynx of stimulation of the external muscles, electricity applied outside the larynx can directly stimulate, feebly but unquestionably, the laryngeal nerves.

Special Reports.

NO. V.—OPHTHALMOLOGY (Continued).

BY CHAS. S. TURNBULL, M.D.

Congenital Dislocation of the Crystalline Lens; Diplokoria.

As ophthalmological anomalies, P. D. Keyser (*Archiv. Ophthal.* Vol. x, No. iii) reports three cases of congenital dislocation of the crystalline lenses, in one (Medical and Surgical

Reporter, July 10th, 1880) aged 26, the lenses were dislocated differently but not symmetrically, as is usually the case. In the R. E. the lens was dislocated inward, and the L. E. directly upward. In the other two cases, which were also anomalies, the lenses were dislocated directly downward, entirely out of the region of the pupil. These two cases were daughter and mother. A case of *double pupil*, diplokoria, in but one eye of a lady aged 26. There was a broad band, 1½ mm. in width, running across, from margin to margin of the iris, at an angle of 110°. It extended only from the extreme pupillary edges of the iris, and was of the same thickness and color and continuous structure of the iris.

Patient had never suffered from any inflammation of the eye. As a congenital anomaly of the iris, it was rare, as occurring in but one eye. By a small incision through the cornea, in the lower and inner quadrant, K. introduced a delicate pair of iris forceps, grasped the band in its entire breadth and cut it off. Then its lower attachment was divided and the protruding iris was replaced from the corneal incision. Pilocarpine solution was instilled into the eye. No inflammation followed, the pupil became round, and the action of the iris has been good ever since.

J. J. Chisholm (loc. cit.) reports two cases of *sympathetic ophthalmia*, as a sequel to cataract extraction, and of iridectomy in glaucoma. Pain and inflammatory process promptly checked by neurotomy of the lost eye. Dr. C. makes the point, *i. e., in an eye in which nerve cutting was effected, there was a complete effacing of a corneal staphyloma.*

Wm. C. Ayres (loc. cit., p. 273) in examining a glioma retinæ endophytum, mentions his discovery of a peculiarly interesting condition, viz: a *gliomatous infiltration of the lens.* The glioma cells had passed both without and within the canal of Petit, along the whole length of the suspensory ligament, up to the lens capsule. When outside of the ligament they seemed to have impinged upon the capsule and passed around it. When within they seemed to have passed directly to the lens and to have forced themselves up beneath the fibres of the ligament, as they attached themselves to the anterior capsule. Though they had not disturbed the continuity of the capsule at any other place, just under the attachment they had broken through and entered the body of the lens. *They had also entered into the body of the capsule itself, and split it into distinct layers, to a distance of some mm. from the capsular rent.*

In another case Ayres, in examining a phthisical eye (phthisical after a severe inflammation in childhood), found *bone within the lens capsule, i. e.*, "the lens was full size, normal in curvature of capsule, while at the same time the body of the lens was entirely replaced by bone. The space within the capsule was filled with true bony tissue, having a perfect system of canals and typical bone corpuscles, with the exception of a narrow zone of connective tissue, *holding the same relative position as the glioma cells in the case of gliomatous infiltration.* Ossification had taken place in layers parallel to the connective tissue next to the capsule, and where these layers of bone were thin, it appeared as if the original fibres had ossified, but, of course, this is impossible, since the lens, being epithelial tissue, cannot ossify."

Dr. Chas. J. Kipp, of Newark, N. J., reports, in brief (*Archiv. f. Ophthal*, Vol. x, No. 3), the *Transactions of the American Ophthalmological Society for* 1881.

Wm. F. Norris, of Philadelphia, read a paper

On the Administration of Anæsthetics in Bright's Disease of the Kidneys, and on some Cases of Sudden Death after Cataract Operations.

Two deaths. In both cases the patients were etherized; both died comatose, and, in both, careful autopsies revealed no organic lesions, except those belonging to Bright's disease. The first patient was a child five months old, and in good health, upon whom he operated by discission. The child recovered consciousness, but died soon afterward. Intense congestion of kidneys, cloudy swelling, and fatty degeneration of epithelium, most marked in the cortical portion. There was no history of hereditary disease. The second patient was a woman, sixty years old, supposed to be in perfect health. Recovery from anæsthesia was prompt. On the evening of the following day she was somewhat feverish, and the urine diminished in quantity and loaded with urates. From fourth to ninth day she sat up and felt pretty well. After that time unfavorable symptoms manifested themselves. On the sixteenth day she was delirious. On the seventeenth day urine was found to contain a small quantity of albumen, and hyaline, and fatty and granular casts. Patient died on eighteenth day after operation. Autopsy showed all organs to be healthy, except heart, in which there was moderate enlargement of left ventricle; and the kidneys, which were markedly congested, and showed increase of interstitial tissue, fatty degeneration of epithelium, and cast material in the uriniferous tubules.

In the discussion which followed the reading of Dr. N.'s paper, Dr. Mathewson, of Brooklyn, said he "had extracted cataracts, under ether, from patients known to have Bright's disease and who recovered promptly." Dr. Carmalt, of New Haven, related two cases in which death followed cataract extraction performed without anæsthetics. In one case death took place four hours after operation, and seemed to be due to shock, which might possibly have been avoided by the use of an anæsthetic; no autopsy. In the other case the patient had had diabetes, from which she had apparently recovered. Dr. C. assisted in the operation. There was no attempt at repair. Patient failed rapidly and died on fourth day. Dr. Norris remarked that the action of ether, in many cases of fatty heart, was beneficial rather than otherwise. Dr. Noyes, of New York, had used ether and chloroform freely in a large number of cases, but had not had a fatal result in consequence. He had used ether when he knew there was Bright's disease, and also in cardiac complications. He is in the habit of using bromide of potassium, and sometimes hydrate of chloral, before the operation, and thinks that in a certain proportion of cases the occasion for the use of anæsthetics has thereby been considerably diminished. It has been his practice, where anæsthetics are given, to produce simply the primary anæsthesia, make the corneal incision, and then allow the patient to fully recover consciousness, which is utilized in the subsequent steps of the operation."

(Concerning the administration of anæsthetics, especially ether, to patients suffering with any form of chronic kidney disease, there seems to be but one opinion, as expressed by all authorities, *i. e.*, that such procedure is, *as a rule, followed by fatal results*, and the weight of testimony confirms this assertion. Nay, it goes further. It condemns such administration as reprehensible, and if operators insist upon setting aside experience, and by so doing trifle with human life, it will not be long before a well grounded suit for damages will bring some careless, or call it obstinate, administrator up with a round turn. We would deprecate Dr. Mathewson's views, if reported correctly, and so also those of Dr. Noyes, if the latter did not beg the question after saying "he had used ether and chloroform freely in a large number of cases;" "where he knew there was Bright's disease and cardiac complications," by adding, "It has been my practice, where anæsthetics are given, to produce the primary anæsthesia, make the corneal incision, and then allow the patient to fully recover consciousness." This we cannot admit as "using anæsthetics freely," or even operating under anæsthesia. In conclusion, we would warn the inexperienced, and would suggest that it will not be many years before juries will refuse to render such verdicts as exonerate the criminally careless administrators of fatal doses of anæsthetics, but they will call for post-mortem examinations of the kidneys, heart, etc., and in proportion as these are found, or known to have been, diseased will they (administrators, operators, etc.) be held responsible. T.)

Of especial interest in this connection is a paper read by Hasket Derby, M.D., of New York, **On Anæsthesia and Non-anæsthesia in the Extraction of Senile Cataract, with Comparative Statistics of 200 Cases.**

The author avoided anæsthetics as much as possible. Of 200 uncomplicated cases of senile cataract 100 were operated under ether, and 100 without anæsthesia. The average age of the patients operated under ether was 67.7, without, 65.8. Loss of vitreous in fourteen with ether, and nine without. The duration of treatment was 18.3 with ether, 16.5 without. Vision, $\frac{1}{10}$ or more, was obtained in eighty-one with ether, and eighty without. Partial success (vision from $\frac{1}{11}$ to $\frac{1}{60}$) in eight cases with ether, and nine without. There was reasonable prospect of success from a secondary operation in two of the last-named operated under ether, and one without. The total failures were nine with ether, and one without. In the discussion which followed, Dr. D. B. St. John Roosa, of New York, and Dr. H. W. Williams, of Boston, thought that the advantages obtained by the use of ether were considerable.

Dr. Kipp, of Newark, thought that the danger of escape of vitreous is much greater than without anæsthesia. Dr. B. Joy Jeffries, of Boston, saw no objection to the use of ether, but does not hesitate to operate without it.

Dr. Little read a paper entitled a *Contribution to the Study of Glaucoma*, in which he gave the details of four cases, all bi-lateral. The patients were all under 20 years of age. Three of the cases occurred in one family. In all cases the eyes were hypermetropic, and in three of the cases the patients suffered also from hemorrhoids. In one of the cases acute fulminating glaucoma was developed twelve hours after the instillation of atropia, and some days later the fellow eye became glaucomatous. The author thinks the fact that three of his cases occurred in one family is especially instructive, as showing a tendency to heredity, and he infers, from the coëxistence of hemorrhoids in three of these cases, and in some others observed by him, that, since in both

diseases textures supplied with a sphincter muscle are involved, a somewhat similar morbid action may take place in both.

Dr. Geo. C. Harlan related a case of *congenital paralysis of the sixth and seventh nerves of both sides.* Patient aged 18, male; marked epiphora and slight haziness of cornea. R. S. $= \frac{20}{120}$, L. S. $= \frac{20}{100}$. The author thought that the complete paralysis of the two abducens, which are so widely separated in their course after they leave the brain, pointed to a central cause and supported the view that they arise from the same nucleus.

Dr. E. W. Bartlett, of Milwaukee, who formerly saw a great deal of *Conjunctival Inflammation after the use of Atropia*, says that since he had used Merk's preparations the difficulty had entirely disappeared.

Dr. F. Buller, of Montreal, reported a case of

Sudden and Complete Blindness after Large Doses of Quinine,

but as the subject had just been confined, and was threatened with puerperal septicæmia, we consider the case too doubtful to mention in detail, especially as the doses of quinine (20 grains, night and morning, for two days) were comparatively small.

Marked Narrowing of the Field, with Diminished Acuteness of Vision (Glaucoma? Kipp) Following the Use of Duboisia,

presumably due to the use of the drug, was the title of a paper by Dr. J. P. Morrell, of Terre Haute.

Dr. Noyes reported a case of

Pulsating Exophthalmos,

which differed in its history and treatment from any on record. A girl, four years ago, after some severe form of fever, was suddenly taken with a pain in the left side of the head, and about the left eye; the globe began to protrude, and within one week there was marked exophthalmos without inflammatory disturbance. For four years the condition of the eye remained substantially unchanged, except that she had occasional attacks of fugitive inflammation. While passing through Dublin, on her way to America, she had a severe attack of inflammation of the eye. On her arrival in New York she came under his observation. He found swelling of the lids, considerable ecchymosis. There was marked protrusion of the globe, and at the lower and inner angle of the orbit a projection was felt, which at first seemed to be a solid growth. Pulsation, however, was felt, and an operation was proposed. Examination under ether showed the tumor to be a distended blood vessel, which came from the orbit, forward, and returned upon a loop. A bruit was heard over the exophthalmos, but not upon the temple. Pressure upon the carotid completely stopped the pulsation, but had no effect upon the protrusion. From this he concluded that it was a purely vascular anomaly, and not wishing to perform so grave an operation as ligation of the carotid, and not being clear with reference to the diagnosis, he decided to ligate the angular artery, and to dissect down to the enlarged vessel, and tie it off. With great difficulty he succeeded in ligating the angular artery. Then dissecting up the protruding vessel, which was as large as a good-sized lachrymal probe, he traced it down, placing one ligature after another in the vessel, and cutting between them. He demonstrated that it was a vein, which he finally ligated at the spheno-maxillary fissure. He then concluded that it was the anterior orbital vein, coming out of the spheno-maxillary fissure, and going back to empty into the cavernous sinus. The wound healed kindly. At the end of six weeks the exophthalmos had disappeared."

CORRESPONDENCE.

FOREIGN.

Letter from Europe.

ED. MED. AND SURG. REPORTER:—

My promise to write you for the REPORTER while in Europe has never been fulfilled, but today I determined to write you my first letter. I came abroad to study abdominal and pelvic surgery, but have really been hard at work on surgery of all regions. In order to get that for which I came such a course was necessary in some places. So I have, therefore, simply studied for six months, in the clinics of Europe, surgical operations and the antiseptic method of each clinic. It has been my pleasure to see a very large number of private operations, and thus I have seen the abdomen opened forty-seven times. Five times I have seen extirpation of the whole uterus. But as I have sent to America my Address in Gynæcology, for the State Society, in which I have spoken especially of abdominal and pelvic surgery abroad, I will not speak of it again in this letter. In about 600 surgical operations, independent of laparotomies, which I have been present at, the method of antisepsis has varied with the operator. But I have not seen an operation done in Europe without *complete* antiseptic precautions; Listerism it all is, but varied to some degree by each operator. To shorten my letter, I will here say that Professor Langenbeck is the only operator whom I have seen open the abdomen without spray, and in this instance his patient rapidly developed a peritonitis. Professors Nussbaum, Volkmann and Esmarch use the spray in other operations, but with the latter

operation air, driven by a pump attached to the hospital engine, takes the place of steam. This is of much advantage, as steam clouds the room and condenses upon the windows, shutting off much light. Moreover, this method by air is the cheapest yet devised. Of the very many antiseptic agents yet devised carbolic acid is found in use everywhere, also salicylic acid; but Billroth, Nussbaum, Volkmann, Langenbeck, Küster and Esmarch all use iodoform, either in spray or in powder. All use the impervious cover for dressing. Iodoform intoxication occasionally occurs, and Prof. Küster lost one patient, from whom I saw him remove a multilocular ovarian cyst, from this effect of the drug. The gauzes from the various agents are variously applied, sometimes as compresses, sometimes as handkerchiefs, a handful at a time on this side, and another handful on that side, and a handful on top, and an antiseptic gauze rolled around it all. The mackintosh over all, more gauze roller over this, and it is completed. Thus it is usual to see it. But by Nussbaum and Küster this is completed by Lister's own method; protective to the wound and the Lister bandage over all, secured by an antiseptic gauze roller. At Kiel the antiseptic bandage is somewhat different from the others. Over the wound is placed, while the spray is in operation, some iodoform cotton, and over this a small bag of naphthaline turf; all is secured by a carbolized gauze roller; over this another bag of turf, much larger, and another roller; if a splint is required it is of glass and padded, and secured by antiseptic roller. If a joint has been resected, over all is applied, for one or two hours, an elastic roller. The limb remains elevated while the elastic roller remains. The turf is the innovation of Dr. Neuber, First Assistant to Prof. Esmarch; he is also the inventor of the decalcified bone drain. That the turf is antiseptic there is but little doubt. Neuber opened the abdomen of five rabbits, and into the peritoneal cavity of each he put a teaspoonful of the turf. This was four months ago. One rabbit died soon afterwards, and tubercle was found in its lungs; possibly a verification of Cohnheim's theory. The remaining four rabbits are living, and look well; they are fat and lively, each with a spoonful of the turf sealed up for months in their bellies. The antiseptic dressing of Neuber is difficult to excel. For instance, by his method, which consists of carbolized spray in the atmosphere during an operation, the addition of iodoform spray in the wound before closing it, the introduction of the decalcified drain, the punching of a few circular holes in the skin, and the turf dressing as I have described it, wounds are rarely ever dressed but once. No pus, no fever, nothing; when the dressing comes off the patient is well. Thus Prof. Esmarch and Dr. Neuber treat all amputations, including the hip joint, all resections of joints. They have shown me cases where the dressing was still intact, the operation having been done four weeks before. The temperature schedule shows remarkable freedom from fever. I saw Prof. Esmarch resect the knee joint to-day, and so dress the leg; this dressing is expected to stay there until the patient is well. The parts once brought together stay there. I have not seen a poultice in Europe, nor half a dozen roller bandages of the old sort. The common drain is of rubber tube. On the extremities all operations are bloodless. In Prof. Esmarch's clinic, to-day, he resected the knee joint, and there *was absolutely not one drop of blood lost; not a single sponge or cotton pledget was used.* He brought the tissues together, applied Dr. Neuber's dressing and an elastic roller and splint. Not a *single artery was tied.* This patient goes to bed with the expectation of not being again hurt by a re-dressing. Prof. Esmarch has used this method in over one hundred cases. Can any one, in the present condition of antiseptic surgery, as seen in Europe, imagine anything so frightful as the common practice of a past surgical era, of draining wounds with strips of bandage, daily washing of them, and all the old practices. They are about gone in Europe, and will go in America, when surgeons are surgeons, and not jacks of all branches of the trade and masters of none.

R. Stansbury Sutton, M.D.

Kiel.

Vaccine Tuberculosis and Vaccine Syphilis.

Ed. Med. and Surg. Reporter:—

The Reporter of March 25th contains the comments on this subject, of Dr. I. Cappie Shand, copied from the *Medical Press and Circular*, from which I make this short extract: "I am of opinion, with reference to vaccination, that it should be optional, although apparently desirable, and that it should be put upon such a footing as to prevent it from propagating such diseases as tuberculosis and syphilis." This is Dr. Shand's opinion. Mine is, that no physician should venture to disseminate such dangerous doctrines without some foundation stronger than the very meagre and insufficient evidence he has offered. The most experienced vaccinators, and those who have had most to do with the treatment of infantile ailments, agree in the belief that disease is not communicable by vaccination. Mr. Marston, an English physician, in the performance of more than fifty thousand vaccinations, "has never seen other diseases communicated with the vaccine disease. Mr. Lees, with equally extensive experience, gives similar testimony. Dr. W. Jenner, who in six years had some thirteen thousand sick adults and children under observation, states "That in no case had he reason to believe, or even to suspect, that any constitutional taint had been conveyed by one person to another, by vaccination." Dr. West "treated twenty-six thousand infants and children" with a like experience. In opposition to all this overwhelming evidence, Dr. Shand describes one or two rather suspicious cases, which prove nothing. For a single case in point, I will relate the history of a case of tubercular disease alleged to have been transmitted by vaccination. A neighboring physician, some years ago, vaccinated a child, who not very long ago thereafter developed scrofula and died. The mother was loud in her denunciation of the doctor for causing her child's death by the use of infected virus. Subsequently she had a second child, whose health she was determined should not be endangered by this same cause, and vaccination was dispensed with. Un-

fortunately for her hopes, however, this child also developed scrofula.

In regard to syphilis being carried in vaccine lymph, I am a non-believer; but, admitting its possibility, there is, practically, very little danger. There are comparatively few cases of infantile syphilis, and no competent physician would think of using virus derived from such a source; if not from conscientious motives, then, in view of the prospect of a prosecution for malpractice. These imputed dangers are mere bugbears; but the matter in dispute might be easily tested without exciting the fears of the public, by confining the experiments to operations on condemned criminals—Guiteau, for instance. In like manner vaccination might be available as a test for insanity, for the learned experts who were examined in the case of that self-inspired assassin, decided that insanity is not only a bodily disease, but that it is also frequently hereditary.

Even if syphilis should prove to be transmissible in the way supposed, it affords no serious objection to compulsory vaccination, for syphilis in its early stage is readily cured, and, therefore, infinitely less to be feared than confluent smallpox. It is a curious fact that all the actual cases of infantile syphilis that come under notice can be traced to sources other than vaccination, and yet so few fears are expressed on the subject.

JOHN T. HUDDLESON, M.D.

Glen Mills, March 30th, 1882.

NEWS AND MISCELLANY.

Official List of Changes of Stations and Duties of Medical Officers of the United States Marine Hospital Service, January 1st, 1882, to March 31st, 1882.

Bailhache, P. H., Surgeon. To proceed to Richmond, Va., as Inspector. January 31st, 1882.

Vansant, John, Surgeon. Detailed as President Board of Survey—physical examination of officers of the Revenue Marine Service. March 18th, 1882.

Wyman, Walter, Surgeon. When relieved by Surgeon Austin, to proceed to Baltimore, Md., and assume charge of the Service at that port. March 4th, 1882.

Fessenden, C. S. D., Surgeon. To proceed to Greenport and Sag Harbor, New York, as Inspector. January 26th, 1882. Detailed as President Board of Survey for the physical examination of pilots. To meet at Boston, Mass., February 16th, 1882. February 7th, 1882.

Purviance, George, Surgeon. To proceed to Gloucester, Mass, to extend relief to shipwrecked seamen. January 12th, 1882. Detailed as Recorder Board of Survey for the physical examination of pilots. To meet at Boston, Mass., February 16th, 1882. February 7th, 1882.

Austin, H.W., Surgeon. To proceed to Cincinnati, Ohio, and assume charge of the Service at that port, relieving Surgeon Wyman. March 4th, 1882.

Godfrey, John, Passed Assistant Surgeon. When relieved by Passed Assistant Surgeon Goldsborough, to proceed to New Orleans, La., and assume charge of the Service at that port. March 4th, 1882.

Goldsborough, C. B., Passed Assistant Surgeon. When relieved by Surgeon Wyman, to proceed to Mobile, Ala., and assume charge of the Service at that port. March 4th, 1882. Granted leave of absence for eight days. March 24th, 1882.

Irwin, Fairfax, Assistant Surgeon. Granted leave of absence for seven days. January 18th, 1882.

O'Connor, F. J., Assistant Surgeon. To report to General Superintendent L. S. S., for duty as member of board to examine keepers and crews of the Life Saving Service. January 4th, 1882. Relieved on account of sickness, and directed to report to Surgeon-in-charge, New York, N. Y., for temporary duty. January 18th, 1882. To proceed to Detroit, Mich., and report for duty to the Surgeon-in-charge. February 9th, 1882.

Banks, C. E., Assistant Surgeon. To proceed to Portland, Oregon, and assume charge of the service at that port. March 1st, 1882.

Devan, S. C., Assistant Surgeon. Detailed as recorder Board of Survey—physical examination of officers of the Revenue Marine Service. March 18th, 1882.

Urquhart, F. M., Assistant Surgeon. To report to General Superintendent L. S. S., for duty as member of board to examine keepers and crews of the Life Saving Service. January 18th, 1882.

Kalloch, P. C., Assistant Surgeon. To proceed to New York, N. Y., for temporary duty. January 24th, 1882.

RESIGNATION.

Hebersmith, Ernest. Resignation as surgeon accepted, to take effect November 26th, 1881. January 17th, 1882.

PROMOTION.

Smith, Henry, Surgeon. Promoted and appointed surgeon from January 20th, 1882. January 20th, 1882.

APPOINTMENT.

Kalloch, Parker C., M.D., of Pennsylvania, having passed successfully the examination required by the regulations, was appointed an Assistant Surgeon, by the Secretary of the Treasury. January 23d, 1882.

Directory for Nurses.

The following communication explains itself:—

HALL OF THE COLLEGE OF PHYSICIANS,
N. E. Cor. 13th and Locust Sts.,
PHILADELPHIA, April 20th, 1882.

The difficulty of obtaining competent nurses at the moment when sickness or accident makes them necessary is only too well known. Even if a list of nurses be kept, it is impossible to know who is engaged and who disengaged, and hence, not unfrequently, twenty-four or forty-eight hours, or even more, are passed in anxious and fruitless search over all parts of the city before one can be obtained. At the same moment many excellent nurses are idle, who, if known, would be instantly em-

ployed. What is needed is some way to bring the two classes together—a Directory which will keep a list of all the competent nurses, both male and female, who wish to register, with an accurate record of their addresses, qualifications, charges, engagements, etc., so that physicians and the public in Philadelphia and the neighborhood may, at a moment's notice, be able to procure desirable nurses for all classes of patients, either by application in person, or by telephone or telegraph. Such a plan has been in successful operation in Boston, Mass., for the past two years, and is precisely what we need in Philadelphia.

Accordingly, the College of Physicians of Philadelphia has determined to establish such a Directory, open not only to its own members but to the entire medical profession of this city and neighborhood, as well as to the public. The office, with telephone connection No. 2103, will be in the Hall of the College of Physicians, N. E. corner 13th and Locust streets, and will be open on and after May 15th, 1882, at all hours, day or night. Any person desiring a nurse may apply to the Secretary for information and assistance in procuring one. A list of wet-nurses also will be kept, and, if desired, their freedom from any evidences of syphilis or other constitutional diseases will be certified to by a physician, after a careful and minute physical examination. Lists of nurses for the insane, for children, rubbers, companions, etc., will also be kept.

A committee of ladies interested in the success of the enterprise will assist the Committee of the college in conducting the Directory.

The charges will be as follows:—

For Registration (paid only once by nurse)..	$2.00
After Jan. 1st, 1883, this charge will be..	3.00
For furnishing addresses of disengaged nurses (paid by patient)—	
between 7 A.M. and 6 P.M.	1 00
between 6 P.M. and 10 P.M.....	2 00
between 10 P.M. and 7 A.M.....	3.00
For finding and sending nurse, an additional	1.00
For wet nurses (uncertified).....	5.00
" " (certified after special medical examination).....	10.00

All charges must be paid in person or by letter, cash in advance.

When a nurse is ordered by telegraph, the money must be sent by telegraphic money order, in advance.

The success of such an enterprise will depend chiefly on the hearty support of the medical profession. Your attention is therefore called to this matter, and your coöperation is earnestly requested. This can be given best in the following ways:—

1. By sending to the Secretary a list of the names and addresses of all the nurses you can recommend. *Please do this at once.*

2. By inducing all your nurses to register immediately, and

3. *By procuring hereafter every nurse you need through the Directory.* This last is especially important, as it accustoms both patients and nurses to use the Directory, and teaches them its value. If you wish to get one of your usual nurses through the Directory, it will only be necessary to furnish your patient with a list of those you desire. The Secretary will refer your patient to any of them that may be disengaged.

Dr. W. W. Keen, Dr. Albert H. Smith, Dr. S. Weir Mitchell, } *Committee of the College of Physicians.*

Assisted by Mrs. Theodore Justice, 1824 Wallace street; Mrs. M. Fulton, 26 South 18th street; Miss S. Stevenson, 249 South 13th street; Mrs. S. Weir Mitchell, 1524 Walnut street; Miss Emily Thomas, Secretary, N. E. corner 13th and Locust streets.

Statistics of Consumption.

From the Providence *Journal* we note that the statistics of consumption in Providence, R. I., as given in the last two monthly reports of the City Registrar, shows some very surprising and interesting results. Dividing the population and the decedents from consumption into two classes, American and Foreign, *by parentage*, the statistics show that in one class a remarkable change in the mortality from the disease has been going on during the past twenty-five years. While the proportion has greatly diminished among the population of American parentage, it has remained nearly stationary among those of foreign parentage, as the following table demonstrates:

POPULATION OF AMERICAN PARENTAGE.

1856—One death from consumption in 268.2.
1865—One death from consumption in 310.1.
1875—One death from consumption in 415.0.
1880—One death from consumption in 435.2.

POPULATION OF FOREIGN PARENTAGE.

1856—One death from consumption in 262.6.
1865—One death from consumption in 248.8.
1875—One death from consumption in 288.4.
1880—One death from consumption in 268.0.

TOTAL POPULATION.

1856—One death from consumption in 266.
1865—One death from consumption in 280.
1875—One death from consumption in 336.
1880—One death from consumption in 326.

From this we note that in regard to the total population there has been a considerable decrease in the ratio of mortality. It would be interesting to inquire into the causes of this diminution of consumption among a portion of the population; and the reasons why this diminution is in one portion of the population and not in the other.

Practice of Medicine in New Mexico.

Through the courtesy of Dr. W. N. Sherman, we have been furnished with a report of "an act passed by the last legislature to regulate the practice of medicine in New Mexico," from which we extract the salient points.

A territorial board of medical examiners is hereby established, which shall be composed of seven practicing physicians of respectability, the three systems of medicine to be represented as follows: Regular physicians, four; homœopaths, two, and eclectics one.

This board shall issue certificates to all who furnish satisfactory proofs of having received diplomas or licenses from legally chartered medical institutions in good standing.

All examinations of persons not graduates or

licentiates shall be made directly by the board, and the certificates given by a majority of the board shall authorize the possessor to practice medicine and surgery. All certificates must be recorded. The board can refuse certificates to individuals guilty of unprofessional or dishonorable conduct, and may revoke certificates for like causes. Any person practicing medicine without having complied with these requirements shall be punished by a fine not less than $50 nor more than $500. The Code of Ethics of the American Medical Association shall be the standard and rule of decision concerning the professional conduct of members of the medical profession. This act became law March 2d, 1882.

Medical Society of the State of Pennsylvania.

It was feared that the recent conflagration at Titusville would materially interfere with the annual session of this body, which is to be held at that place, commencing May 10th.

The Committee of Arrangements announce that they have ample lodging room in private houses to supply all who come, and that the hotels that are left will feed four hundred, if necessary, and feed them well.

The committee are ready to assign good rooms to all the members and those who may accompany them.

An American Work Translated into Italian.

Dr. Louis A. Duhring, of Philadelphia, has received the first part of the Italian translation of his "Treatise on Diseases of the Skin," the translator being Dr. A. Scambellurri, of Naples. The work is there published by Giovanni Irvene. We are glad to make this announcement, from a patriotic standpoint, since it tends to show the fact that American authors are commencing to be appreciated in Europe, and in justice to Professor Duhring, whose magnificent work stands deservedly at the head of the literature of dermatology.

Mount St. Mary's College.

The famous old Catholic College of this name, located near Emmettsburg, Md., has been closed, owing to the outbreak of an epidemic of malignant scarlet fever. More than one hundred and twenty boys were sent to their homes. Two deaths occurred among the students, and while only one other boy had the disease, it was deemed wise to close the college. In the seventy-four years the college has existed, this is the first time it has been visited by contagious disease.

Items.

—Dr. Lewis, a Chicago opponent of vaccination, has died of smallpox.

—Triplet sons, fifty-two years old, and a father 116 years old, are the boast of Robert A. Wright, a mill hand, seventy-one years old, living in Santa Rosa county, Fla.

—A learned Chinese physician, who has traveled much and studied in Europe, expresses his surprise that medicine is regarded as a reputable profession. In China, it seems, the better classes regard it as humbug and superstition.

—At a French matrimonial agency office: "Oh yes, sir, we have what you want—an orphan of about twenty years of age." "Very good. Is she pretty?" "Not particularly, but she has a fortune of 500,000 f. And, besides, she is consumptive." "Consumptive! Are you quite sure of that?" "Oh, certainly, sir; we guarantee it."

—On March 9th, Mr. Reid's Vivisection Abolition Bill was read for the first time in the British Parliament, and put down for second reading on March 29th. Mr. A. J. Balfour gave notice that on the order for the second reading he will move the following amendment: "That while due provision should be made for preventing the infliction of unnecessary pain on animals, it is inexpedient so to limit scientific investigation as to hinder discoveries which must result in a great diminution of human suffering."

QUERIES AND REPLIES.

A. E. R., San Francisco.—You are right in your interpretation of our editorial of March 11th. By referring to our issue of February 18th, page 192, column 1, you will notice the revised code of ethics as adopted by the New York State Society.

MARRIAGES.

McCARNY—APPLETON.—On April 11th, 1882, at the Haddonfield Baptist Church, by Rev. R. F. Young, Robert H. McCarny, M.D., of Philadelphia, and Miss Mary L., daughter of Samuel Appleton, Esq., of Haddonfield, N. J.

NEVILLE—BROWN.—Wednesday evening, March 23d, 1882, at Chambers Presbyterian Church, by Rev. J. M. P. Otts, W. H. H. Neville, M.D., and Miss Lida T. Brown, daughter of E. D. Brown, all of Philadelphia.

PALMER—PROUTY.—In Newport, Vt., March 28th by Rev. Henry Fairbanks, Lewis M. Palmer, M.D., of Litchfield, Me., and Nellie B. Prouty, of Newport.

SMITH—POTTER.—At the home of the bride's parents, on Walnut Hills, Cincinnati, O., April 5th, by Rev. S. S. Potter, assisted by Rev. J. G. Monfort, D.D., Samuel L. S. Smith, M.D., of San Angelo, Texas, and Miss Elizabeth Ray Potter.

TURNURE—DIXON.—On Tuesday, April 4th, at Nyack, N. Y., by Rev. P. V. Van Buskirk, Dr. Milton Turnure, of Closter, N. J., and Miss Carrie Dixon, of Nyack.

DEATHS.

ALEXANDER.—On Saturday morning, April 8th, at Princeton, N. J., Archibald Alexander, M.D.

BEADLE.—In Poughkeepsie, N. Y, April 5th, 1882, Edward L. Beadle, M.D., in the 74th year of his age.

JACOBY.—On Thursday, March 30th, 1882, at his residence, 161 Bleecker street, New York, Dr. Moses Jacoby.

MANLY.—On Friday, March 17th, 1882, of whooping cough, Josephine A., daughter of Dr. Thomas H. and Olivia B. Manly, aged nine months.

MASON.—In New York, on Thursday, the 13th inst., at his late residence, Erskine Mason, M.D., aged 45 years.

STILLE.—In New Orleans, La., March 28th, Benjamin Stille, M.D., formerly of Philadelphia.

STUDDIFORD.—On April 15th, 1882, Theodore H. Studdiford, M.D., of Lambertville, N. J., aged forty years.

VAN OSTEN.—In this city, on the 5th instant, Dr. James Van Osten, aged fifty-three years.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1314.] PHILADELPHIA, MAY 6, 1882. [Vol. XLVI.—No. 18.

Original Department.

Communications.

SICK HEADACHE.

BY T. CURTIS SMITH M.D.,
Of Aurora, Ind.

Few affections are met with more frequently. Few are less amenable to treatment by a careless prescriber. Few cases but can be more or less completely relieved, if the remote and immediate causes of attacks are well searched out, and assiduous efforts are made for their removal. One great obstacle in the treatment of this affection, with which we so often meet, is the inefficient efforts our patients make in seconding our advice regarding prophylactic treatment. Every one who has been a close observer of these migrainous patients must have noted that preventive measures, skillfully directed, and diligently carried out, will forestall many a fierce assault of the affection, will break the force of the onset, or even entirely prevent any painful suffering. Continued and watchful prophylactic management will, in time, so far remove the disease as to render the attacks light and far between in very many cases. Such continued efforts will be far more likely to be crowned with success where the element of heredity does not too strongly enter the case, than in those where such constitutional tendency already exists. That migrainous attacks may be acquired by any habit, labor, or exposure that by continued wear and attrition breaks down the stamina of the bodily powers, is too evident a clinical fact to need more than simple mention here. Time and again have patients come under my care who had been soldiers in the late war, and who protested that prior to the toils, marches, contests, exposures and privations incident to active military campaigning, they were free from all forms of headache. We meet often with men worn out with their labors in civil life, who, in consequence of nervous breakdown, become afflicted with frequent attacks of sick headache. In other words, the overworn nervous system expresses its undue strain by a storm of head pain with concomitant nausea, vomiting, malaise, etc. Again, we more frequently see this disease in over-worked, over-nursed, extra fashionable or dyspeptic women, and too often in those troubled with some form of uterine disease or functional menstrual trouble. Indeed, the subjects of migraine, to their sorrow, often find that any and everything that disturbs digestion, produces slight constipation, or disturbance of the function of any leading organ, or that a little unusual exposure, irregularity of securing meals, loss of sleep, any sudden strain, over effort or excitement is sure to find a most painfully unhappy expression in a more or less prolonged and furious assault of sick headache. One who is especially subject to such attacks lives in constant dread of such a storm of wretched nervous expression.

I am well acquainted with and have often prescribed for a typical case of this migrainous affliction. He is aged 40 years, of naturally good physique, of good habits, formerly a great smoker, but has ceased from that years ago; never intemperate, always a hard laborer in his early years, and a hard student after the age of twenty; the latter often concurrent with hard manual labor. He entered military service at

twenty-two, where he attained the rank of major in less than two years, and by continued exposure, over marchings, hard-fought contests, privations, etc., coupled with a mind ever weary and restless in his efforts to reach a higher position as well as to thwart and defeat the enemy, managed to see the close of the war with a broken constitution, bringing home a body weighing about 115 pounds, that had weighed 142, and with it a legacy of chronic diarrhœa, dyspepsia and occasional severe attacks of headache, not especially accompanied with nausea, but with great nervous prostration. Soon some of these troubles, as the diarrhœa and dyspepsia, disappeared, and, in a measure, the cephalic pains; but he never reached his former weight and generally averaged twenty pounds less. Hard study and continuous labor in his line of business was sufficient to bring on, at quite regular intervals, sharp migrainous attacks. But for these he never left off from his work until after enduring them for fifteen years. Then they came with such a furious storm, and so oft repeated, as to tell on his strength severely and send him often to bed to watch out a night, or days and nights, of most wretched agony. By this time two hours of severe, continued mental effort would prove to be a certain provoking cause for an assault of the pain. Also any considerable bodily fatigue, unusual excitement, loss of sleep, the too long deference of a meal, even the absence of his usual coffee or tea at meal-times, the eating of an apple or ever so small a lunch between meals, the slightest unusual heat or chill, cold or damp feet, exposure to slight rain; in short, the very slightest event unusual to him, and which a healthy man would not notice, was the unfailing precursor of a migrainous assault of sharp severity. I have known quite a large number of such unfortunate subjects, among both male and female patients. I have given the above case the more fully because it is really a typical case, and many a one who reads it, if greatly subject to sick headache, will behold their own likeness in it. But a few days since a patient called on me with whom I had never before met. He proved to be the exact counterpart of the case above referred to. Another, a lady, whose symptomatic history in all points was similar to these cases, so far as it was possible for one of her sex to be so. No doubt every one of considerable experience has met with and noted such cases, and could multiply them many times over.

It is not my purpose in this paper to enter into the pathology of this affection, as I may do at some future time, but simply to enter its field of symptomatology and treatment, and especially to call attention to *one symptom* that has never been named in connection with it, as far as I know. This symptom, while not of vast importance, goes to help make up a case, and to show, if need be, more clearly the neurotic reflex character of the whole storm of migrainous pain.

Symptoms.—A person who is subject to often repeated attacks of sick headache is generally able to say, one, two or more days before the storm of suffering bursts upon him in sharp cephalic pain and neurotic nausea, that he is threatened with such an assault. The prodromic symptoms are quite clear and numerous. Not always the same in the same person, and certainly not always the same in different subjects. We may not be able to name every prodromic or other manifestation. Certainly every symptom named will not attach to every case that comes under our notice.

Among the first symptoms of an approaching attack in many cases, will be a feeling of very marked exhilaration, very like that produced by an excessive indulgence in strong coffee or tea. With some, this exaltation affects only the nervous system, without in any marked degree affecting cerebration. This symptom, when present, is always one but more frequently two days in advance of the gathering storm. It is like the mariner's calm, when not a ripple disturbs the placid surface of the wide spreading waters. It is "the calm before the coming storm," always auguring a mighty agitation of the on-coming raging elements.

Accompanying this symptom, or following closely upon its heels, is often a markedly craving appetite that will not be appeased by any ordinary meal. If this is allowed its full run, to satisfy it will always precipitate the attack and add to its fierceness. Especially is this so if supper is the excessive meal. Soon after such an indulgence a feeling of general lassitude, physical and mental, comes over the person. The stomach that but a short time before opened its mouth so wide to take in food, and like the grave would never cry "enough," is now weighed down with its load. It can neither throw it off nor readily digest it. The feeling of excessive fullness becomes more distressing, twinges of pain now begin to course through the temporal and frontal regions, the muscles of the nape are sore to pressure and the weight of the garments fitting there produces a sensation as of great weight, which causes the subject to repeatedly raise and throw back his head or push back his collar, as if to lift

it away. There is also marked tenderness on making pressure on the lower cervical and upper dorsal vertebra, especially the seventh cervical and first dorsal. There is a heavy, dull, occipital pain, reflected forward to the sides or crown of the head. Very often there is from the very first a spot on the very crown of the head, as large or larger than a silver dollar, that feels as though a light weight was sitting there all the time, and when the patient's or physician's hand is placed and held there a little while, it seems to be warmer than the surrounding surface. The thermometer will often indicate that the sensation is not without an increase of heat above that of the surrounding area. Sometimes this spot is the central seat of all the severe suffering; a real clavus sensation. Many of these latter symptoms, and more yet to be named, point clearly to the fact that the cilio-spinal centre is profoundly involved in the pathology of this affection, and that the terminal twigs of the superior division of the trigeminal nerve are the ones, above all others, that will manifest their painful activity in the fierce explosion about to take place.

Returning again to prodromic symptoms, we desire to note that many, perhaps a majority, of these cases have an entirely different prodromal symptomatic history. The subject may to-day be as well as ever in life. But when he goes to bed he has a marked sensation of hunger. If posted as to its meaning he will carefully abstain from the slightest indulgence in food. This sensation is very often caused, not by real hunger, but by real indigestion. If the seeming hunger induces the person to eat at that hour, he will most likely pass a restless, dreamy night, and on rising, often long before rising, he will note a headache already set in, and the usual chylopoetic manifestations already giving expression to their morbid state. If he is careful not to eat, but go quietly to bed, get as good a night's sleep as possible, he may miss the threatened attack entirely. But he is more likely to be less fortunate. He will probably rise in the morning feeling as though his stomach was already loaded with very partially digested food; or it may be already sour, and there may be some nausea. If now he is careful to eat very little or really no breakfast or best of all, drink only a teacupful of hot, well-salted water gruel, and then go about his business, taking care not to overdo nor overeat during that day, he may, and most likely will, miss the attack for that time. But if he should be led to eat a hearty breakfast I can insure him that he will not eat much supper the following evening, and very likely sleep but little during the night. This condition of threatening may last over two or three days, notwithstanding the most rigid care. But so surely as any indulgence looking at all to satisfy appetite is allowed, just so surely will the storm burst forth in all its fury. If the subject of migraine has the nerve and patience to persevere in abstinence from more than very small meals, of very light and very digestible food, until an almost uncontrollable hunger comes on, and with it a feeling that if this hunger is not in some measure appeased the headache will surely and certainly come on; he may then eat a very *moderately* full meal, with the assurance that he will at once be relieved thoroughly. He can then go on with his diet and labors as in ordinary health. But if, even now, when this demanding hunger is upon him, he gives full and unbridled license to his appetite, he will very surely suffer the penalty by a more or less fierce paroxysm of migraine, that will likely be quite long continued. If such a person, feeling the hunger before named, at or about bedtime take the precaution to swallow a pretty full dose of pepsin in some acid solution, and then will carefully guard his appetite the next day, he will quite surely escape his enemy.

Again, another class of these migrainous subjects pass through an entirely different routine of prodromal manifestations. They may have a day of happy exhilaration, but are more apt to have one in which light not ordinarily too bright has all at once become painful to the eyes, or surrounding noises not commonly noticed have suddenly become exceedingly annoying and tormenting. Little occurrences that ordinarily produce no chafing now grate harshly on the feelings. A spiteful reply to a best friend may now be heard when the custom has been that of gentleness or even of affection. Again, there are dull, moody feelings, ill forebodings; friendly acts are misconstrued, slights are conceived where no such thing was dreamed of by the person supposed to render it. Best friends are suspected of having turned a cold shoulder. Business, however prosperous, somehow does not move smoothly. Such persons are sometimes the subjects of visionary phenomena of an interesting and somewhat singular character. Dark spots float in the air. Sometimes many circular stars of rainbow hues float, at seemingly vast distances, before the eyes, always moving so as to keep in the field of vision, and often having a rotary motion among themselves. Others may have pass before their eyes, whether shut or open—more likely when shut—beautiful panoram-

ic views, in which variegated colors and beautiful and fantastic figures may pass in rapid succession. The subjects of migraine always know the meaning of all this morbid visual phenomena, and can have a little time to prepare for the on-coming storm, for when these manifestations have been noted, a very severe and agonizing paroxysm may be almost unfailingly looked for within a few hours. In some cases these optical illusions are not manifested until the severe suffering is fairly on.

The sense of hearing may also be the seat of perversions, but such cases have very rarely come under my notice, and I am not prepared to state their character, from any personal observation.

Besides the divisions of cases above referred to, there is yet another, where the person obnoxious to these attacks may rise in the morning feeling as well as usual. He eats and drinks and feels well. But he has a trip to make to some distant point, by rail, or by buggy or coach. Before night he is roaring with sick headache, with no known cause for it only that he has changed his usual routine of living for the day. I am well acquainted with a lady who when she came under my care could not even go to a near neighbor's on a visit, or to a church near by, without being made the subject of the most tormenting attack of sick headache, lasting sometimes two or three days. In some women the menstrual epoch is always ushered in and accompanied with most fearful head pain.

In many subjects a day of constipation is sure to be followed by an attack. Constipation in many is the sure and sole cause of the whole trouble, and can always be relieved by securing moderate or free catharsis. Biliousness is a common precedent. So also is lithuria, or the inactive condition of the renal organs. That these organs become sluggish and fail in the free performance of their functions primarily, and thus give rise to the migraine, I do not in any wise believe. On the contrary, I am reasonably sure that all the chylopoetic symptoms are the result of disturbed nerve power, or of a neurasthenic condition of the nerve centres, which themselves have been weakened or unfavorably impressed by some indiscretion in the manner of living, or in over taxation of physical or mental powers.

I will now refer to a rather unsavory symptom that I have never seen mentioned by any writer, nor heard referred to in any way by any person. This, like those already given, is also premonitory, and very often constitutes the first and most persistent outpost of alarm, never letting up until the force of the attack is past and amelioration is declared. How shall I describe it so there may be no mistake? I will speak plainly, then I shall not be misunderstood. Every one has now and then felt the more or less pressing necessity of visiting the water closet to evacuate the bowels, and yet, from force of the situation, could not for a while respond to this call of nature. In order to restrain the evacuation for a time he must needs bring his volition to bear strongly upon the sphincter ani, and if hardly pressed, will also call into action the levator ani muscle, and there retain the muscles in tonic contraction until such time as he may relieve himself. Well, the symptom I refer to now produces just the sensation, or quite nearly that which is felt by any one who feels the necessity of going to stool and yet must needs wait a while—cannot go just then. In other words, there is a firm, tonic contraction of the sphincter ani fibres, and also of the levator ani muscle. This morbid manifestation is very often among the very first to give warning of the on-coming storm of sick headache. It is also one of the most persistent of the symptoms, for it lasts from the very first to the very close of the assault. Whenever these muscles let entirely loose from their tonic contraction the attack for that time is quite at an end. When this tonic contraction is fairly set up, there is also noted a rather tense or *on-the-strain* sensation of the general nervous system. Soon after this the full outburst of the storm is established.

When we take into consideration the character of the nerve supply of the sphincters and of the levator ani we may at once understand that the neurotic element in this affection quite clearly predominates over that of the visceral or chylopoetic, and that the symptoms referable to these organs arise secondarily and as an outgrowth of neurotic disturbance. That continuous contraction of the sphincters is their normal state is almost too well known to even mention. If such were not the case all evacuations must needs be involuntary. Hence what we mean by tonic contraction of the sphincters, internal and external, is their painful or more or less distressing grasp of the lower end of the rectum, which continues throughout the inception, rise and decadence of attacks of sick headache.

The sphincters and levator ani are supplied by branches of the pudic nerve, which in turn comes from the sacral, and this latter from the spinal cord. Hence the spinal cord presides over and controls this outlet of the alimentary canal. These muscles are classed among the

voluntary. Now, if this irritable state is present, as I have tried to point out, so as to produce such unpleasant contraction in the earliest part of attacks of sick headache, and so continues throughout, it seems to me to clearly indicate an irritable condition of the spinal nerve centres that give expression in this symptom, in advance of almost any others commonly noted as prodromal, and far in advance of the grosser manifestations. The only special importance in this symptom is its advanced warning of the coming enemy—sick headache—giving time for preparation to meet or prevent the attack; and also in that it points to the neurotic origin of the affection, and in that the spinal nerve centres are early affected as well, no doubt, as those of the medulla. In one case, often noted, this symptom is frequently present, two or three days in advance of the attack of sick headache. At about the time this symptom is noted, the temperature may be found from .5° to 1.5° above normal. I have not yet made a sufficient number of thermometric tests on this point, however, to feel positively assured of its accuracy in many cases.

It is a common expression with persons who are migrainous subjects to say, in response to inquiry, "I am always costive at the time the headache is coming on," or "I never have the headache when I am not constipated." Now I do not believe that these sufferers are always really constipated at such times more than at others. But through the increased reflex action of the spinal nerves, due to abnormal irritability, these sphincters grasp the outlet of the rectum with unnatural tightness and retain the contents there, in this way, an unusually long time, during which the fecal lumps become dry, hard, and difficult of emission. This gives the appearance of constipation, when, in real fact, if a person thus affected would go to stool at his regular time he would most likely effect an evacuation, and so remove one etiological factor of migraine. The sphincters are voluntary muscles, and can, therefore, be relaxed at will. But during threatened sick headache it requires constant volitional efforts to keep them slack.

True, I have spent considerable time and ink on the prodromic symptoms of an attack of migraine. But this has seemed necessary. It is especially desirable to make these clear, for it is only in the early portion of such attacks that treatment is of greatest benefit to the sufferer.

The morbid manifestations of a fully developed assault are quite well known. With most persons there is well marked gastric disturbance. This may result from acute dyspepsia, acidity, a sense of weight or distention in the stomach, or distressing nausea, vomiting, etc. There is sharp pain in the head, generally in one temple, or it is supra-orbital or occipital. It may occupy the crown. Sometimes the whole head is involved. Often the whole man is sick. There is now a rise in temperature, greatly and painfully exalted sense of hearing, and well marked photophobia. A light brought into the room at once excites great suffering, even though the eyes be closed and the head covered. The character of the pain is not always alike. Sometimes it is of the grinding, boring, agonizing character, often aggravated at every pulsation. Again, it is that of clavus, or it is of the most sharp, lancinating fierceness conceivable. Sometimes there is a heavy dull pain accompanied with great distress from nausea or vomiting. During this stage there is great pallor of skin, or the exact reverse of it, according to whether there is determination of blood to the head or not; and there is every grade between these two extremes. Whenever there is an anæmic cerebrum, there, quite surely, will be found a dilated pupil, feeble pulse, and distressing prostration. In such a case the pain is nearly always of the keen, lancinating character, and generally considerable gastric distress without much nausea. In the red and turgescent-faced subject of migraine, there is far more apt to be excessive nausea, some vomiting, and a terrible thumping headache, with contracted pupil, congested conjunctiva, hot, dry skin, and hard, full pulse.

One almost constant symptom in all forms of these attacks is coldness of feet and of hands. Another one of this stage is a heavy soreness and some tenderness of the trapezius and rhomboid muscles. To these, many minor and some graver uncomfortable symptoms might be named, but we forbear, as we yet have a little mercy on the reader. Some distinct types of this affection have not been named here at all.

Treatment.—How to say much in a few words here is difficult to determine. Preventive measures are by far the most effective in producing permanent good. Is the subject overworked in mind or body? Give him rest, if possible. If rest is not attainable, give him as complete rest as you can. A change of labor, or a change of places, of diet, of surroundings, modes of thought, or of associates, the leaving off of tea, coffee, *tobacco and spirituous drinks*, late hours, moderation in venery, moderation in eating, and a careful choice of the food taken, the regulation of exercise and a proper time for it, the avoid-

ance of undue excitement, and of immoderate laziness while using a full diet; all these and many other points need looking after, and demand careful attention at the hands of the physician, in order that he may direct his patient, and help him to avoid bumping against some of these rocks greatly to his discomfort. The more nearly the migrainous patient approximates a true physiological plan of living, the more surely will he escape the assaults of his bitter enemy. But if he live in violation of the laws of health, he will have frequent occasion, like Ahab of old, to cry out, "Hast thou found me, oh! mine enemy," but unlike Ahab, will not be able to drive him away so effectually, as that he shall never return during this lifetime. Nay, more, the laws of heredity may bind this same enemy to the temples of the children. During the intervals of attacks, in addition to precautions above referred to, a little steady medication may be made quite effective. Dyspeptic trouble should be carefully removed. Also constipation, and any morbid habit of system, when possible. Then, perhaps, no one remedy will yield as much benefit alone, as a long continued use of nux vomica. A pill of ext. nucis. vom., gr. ss, twice or thrice a day for weeks together. Some will not bear so much. To this may be added, a part of the time, gr. $\frac{1}{20}$ to gr. $\frac{1}{10}$ of arsenious acid. If constipation is prominent, add also to the pill aqueous ext. aloes, gr. ss, and fel. bovinum gr. ij to v. The addition of ext. belladona is often beneficial. When all these are combined, it is better to divide the dose into two pills. Sometimes a minute dose of arsenic alone, three times a day, will do much to effect relief in the frequency of attacks. The steady, careful use of galvanism will often prove highly useful. Sometimes iron is needed. Sometimes a bad habit needs only to be corrected. Sometimes the removal of constipation alone, will do the whole work of giving relief. Each case must be met and treated as found. With saying this much as to general treatment, we shall turn now to that needed during an assault of this misery-making affection.

Here we are met at the very threshold with the clinical fact that no two cases are alike, and seldom do we see two cases that will alike yield to the same plan of treatment. Only a careful analysis of each case in hand will ever enable us to meet with ready success in securing relief during the time of attack.

If possible, the patient should be placed in a dark, quiet room, of moderate temperature, and after bathing the feet for half an hour in *hot* water, in which a handful of mustard has been thrown, he should lay quietly down and sleep, if he can. There is a little knack in using a foot-bath that it may not be needed to name. It will do no harm to do so, however. At first, place the feet in water as hot as the feet will bear, throw in the mustard, and every few minutes add a little *hot* water to the foot-bath. This will keep the temperature up, and soon the feet will comfortably bear water very much hotter than at first, and more benefit will accrue to the bather.

If there is great nausea an emetic of fl. ext. ipecac or zinci sulph. will be very advantageous. A large drink of hot water, a pint, two pints, or even more, taken with or soon after the emetic, will be very beneficial in emptying and washing out the perhaps loaded stomach, or one that may contain bile. If there is acidity give soda carb., ʒj to ʒij, and report in a short time, if needed. A saline aperient may be often best. These measures promptly carried out often yield quick relief. If not, then the system is ready for some form of anodyne, or nervous stimulant, or nervous sedative. It is not always that such measures as above named can be carried out, as the business or situation of the patient will not permit it to be done. But whether these or similar means have been adopted or not, the question of immediate relief is one that demands our attention. The sufferings are often so acute that the patient will brook no long delay for relief. What now shall be done? Well, we must take a moment to survey our patient. Has he a dilated pupil, pale skin, cold hands and feet, feeble pulse, great prostration, pain confined to temples or supra-orbital region. If so, and he has a sour stomach, give at once soda bicarb., ʒij in half a glass of water. That puts one obstacle out of the way promptly. Now to such a patient I have many times given very prompt relief by such a formula as this—

℞.	Ext. aconiti rad., fl.,	gtt. iv
	Ext. belladonnæ, fl.,	gtt. iij–v
	Morphiæ sulph.,	gr. $\frac{1}{10}$
	Spts. æth. nit,	ʒ ss
	Aquæ vel. syrupi,	q. s. M.

Sig.—Take this quantity every ten to twenty minutes until relief is afforded, or until the characteristic effects of the aconite or belladonna become apparent to a marked degree.

Alleviation most always comes before the physiological effects are made very manifest. The different remedies in this prescription may be varied to suit each case. I have one patron to whom I give this formula, in this wise—

℞. Ext. aconiti rad., fl., gtt. xv
Ext. belladonnæ, fl., gtt. x
Morphiæ, gr. ½
Spts. ammon. arom., gtt xx.
Or, in lieu of the latter,
Spts. rectificatis. ℥j
Aquæ vel. syrupi, q. s. M.

Sig.—Take at once.

This is repeated with a full or partial dose of aconite in three or four hours, if needed. But generally a single dose so far settles the matter as that he will go about his business without stopping, often becoming entirely free from suffering, or so sufficiently alleviated as not to especially care for the pain. But if I find this patient with a greatly disordered stomach, inactive kidneys or liver, or costive bowels, this dose will not afford thorough relief. It will dull the keen suffering, but there is no real comfort attained until the organs above referred to are brought to a full performance of their proper functions. This may be done by remedies and means named before But I want especially to name a cathartic, not much in use, that is often happily adapted to many of these cases, and especially to the last conditions above mentioned. I refer to sulphate of soda:—

℞. Sodæ sulphat., ℥j
Sacchar. alb., ℥ij–iv
Acid. sulph. arom., gtt. xx
Aquæ, q. s. ℥viij. M.

Sig.—Stir well and drink at once, or within a short space of time.

This acts as a pleasant and very prompt cathartic, and for many reasons which I cannot now name, it produces a sensibly good effect at once. Lemon juice may be substituted for the arom. sulph. acid, and it will be better given in hot water. It does better work when received by an empty stomach. If possible, it should not be given soon after a full meal. It must be remembered, however, that the large dose of aconite named in the case above mentioned is not a safe one to give in every case. Many persons would be absolutely poisoned by that quantity, given at a single portion.

In very many cases, suiting the description given above, and treated by the plan named, it will be found that a strong cup of hot coffee and a little quiet rest will settle the whole trouble. Also, that sometimes such a patient may have a very keen appetite, which, if moderately indulged, may bring prompt relief. But if the patient be of intemperate habit in the use of coffee or tea, these agents will only add to his sufferings. If his stomach is already encumbered with food, or the tongue shows a heavy yellow coat, or is thick and indented by the teeth, having a white fur all over its surface, it will be unsafe to advise him to eat, however keen his appetite may be. It will but add to his pain, or prolong the attack.

Again, where the attack has been brought on by overwork, and there is marked exhaustion, a full dose of nux vomica alone may and sometimes does afford wonderfully prompt relief. The same is sometimes effected by a dose of ammonia, or of whisky. But the use of the latter is of questionable propriety, even in the most temperate, as it may lead to its habitual and therefore dangerous employment.

But we have yet another class of cases of this same affection, but presenting symptoms exactly the reverse of those we have had under consideration, if we may, of course, except the pain. They are full blooded, red faced, and perhaps fleshy people. In them the head will be hot, face flushed, even turgid, the pulse hard and full, and every systole of the heart will cause a thumping pain to be felt in the head. These cases need the hot foot-bath, perfect quiet, often an emetic given in an *abundance of hot water*, so as to secure easy emesis and free prespiration. If the stomach will receive it, large doses of bromide of potassium will serve a very good purpose. Ergot with it may add to its power. But I prefer the free use of aconite to the ergot here; and it may be given in quite liberal doses. It will soften the systole of the heart better than ergot, and have anodyne advantages far superior to it. The free use of a saline cathartic in such a case will be beneficial and we generally prefer the one above named.

In these cases of full habit with a tendency to congestion the use of arsenic in the interval will produce a very wholesome effect. This will be found especially so where the subject has passed middle life and atheroma has begun, and if there is a sluggish venous circulation, and puffy condition of the face or eyelids, its use is strongly indicated, and should be continued for a long period. If the bromide of potassium be used in the congestive form of sick headache it should be given in large doses frequently repeated.

It will be noted that I have set forth the two extreme conditions under which sick headache is found to exist. One will not see many cases until he will note every grade between these extremes. To meet each case successfully will require very close discrimination and a clear understanding of the nature of this affection and of its therapy. One reason why migraine is a professional opprobrium, is because of the very little attention given to its pathology and to the

proper interpretation of individual symptoms. We will make a few suggestions that will, we think, help to determine the proper course to be pursued in these cases, and then close.

It will rarely be wise to advise strong coffee in sick headache when the patient is an intemperate user of coffee or tea.

It will rarely do well to advise any form of opiate in the congestive form of headache. If the pupil is contracted or contracts quickly under a moderate light, the use of an opiate will be of questionable propriety.

In the congestive sick headache, large doses of potass. bromid. are clearly indicated. In those cases where the congestion is not well marked, but where the pupil is but little dilated or contracts quickly under moderate light, potass. bromid. is indicated in tolerable large doses, *i.e.*, ʒss repeated every half hour until relief is afforded. Aconite may well be added. In all these forms of headache aconite may be used with distinct advantage with the bromide. Sometimes without it.

It will always be wise to correct acidity of the stomach, to open the bowels if costive, or if not already quite free, to stimulate the liver, kidneys, and skin. A hot mustard foot-bath is of great utility in most all forms of sick headache. A tolerably dark, cool, quiet room will be the best resort for these patients during the assault. All business and worry of every kind should be put aside for the time. The patient should, under any form of sick headache, abstain from any but very light, digestible food in very moderate quantities. The exception to this is only found in the real—not apparent—hungry headache, as it is commonly called.

An emetic, a mild one, may be given with marked benefit where there is great nausea, or where there is a load of undigested food in the stomach. In cases presenting the dilated pupil, pallid face, cold extremities, weak pulse, small and frequently repeated doses of morphiæ sulph., with aconite and belladonna, will be found very useful. If the prostration is very marked, arom. spts. ammonia may be also given. Sometimes a pretty full dose of ext. nucis vom. will act like a charm.

Some of these latter cases will tell you never to give them morphia during sick headache, as it always leads to excessive vomiting and a great aggravation of the distress. But if to such a case—the indications being for it—you give morphiæ sulph. gr. $\frac{1}{20}$, or even $\frac{1}{40}$ every five minutes, in a teaspoonful of water, until the pain subsides, your patient will bear it and be surprised at the thorough and prompt relief afforded. I have often tested this practice thoroughly, to my great satisfaction.

ON THE DETERMINATION OF SEX IN GENERATION.

BY T. M. HARRIS, M.D.

Read before the Ritchie County, West Virginia, Medical Society.

The subject of the determination of sex in generation has long claimed the attention of physiologists, and although there have been several theories advanced in regard to it, yet we are compelled to say that it is a subject of investigation on which we have not, as yet, attained to any certain knowledge. It is well understood that in successful coition the ovum of the female is impregnated by the semen of the male ; and that in this union of the germinal elements is involved the development of a new being after the kind of the procreating pair, either male or female. Now, when we reflect that the continuation of the race demands the two sexes ; and also that the best development of the race demands that they should be found in a nearly equal ratio, we are bound to conclude that the sex of the new being is determined by some law; and that this law, or determining cause, is intended to secure the necessary uniformity of ratio in the sexes. It is not my purpose, in this paper, to advance, dogmatically, any theory ; but starting from the above proposition, to call the attention of the members of this Society to a theory that has been advanced, that has about it as much of the air of probability as any that I have seen, in order to elicit observation that may verify or disprove its correctness. The theory is this: That the sexually determining force is found in the excess of sexual desire in the male or the female parent, in the act of coition.

If the passion or sexual desire of the male is greater than that of the female, the result will be a female offspring ; and, on the other hand, if the sexual desire of the female be stronger at the time of conception than is that of the male, the result will be the procreation of a male. In favor of this theory it has been argued that in case the uniformity of ratio in the sexes should be broken in a very marked degree, so that the excess of either males or females would be very great, the necessity would manifestly be the restoration of this ratio; and so if the excess should be on the part of the female sex, it would naturally result that the passion or sexual desire of the female, in the procreative act, would be

stronger than that of the male; and that by the sexually determining force of this stronger passion a male would be produced, thus tending to the restoration of the equilibrium of the sexes; and *vice versa*.

Having placed before you, as succinctly as possible, this theory, I will now proceed to observe that it can only be verified or disproved by a long course of careful observation; and I beg leave to say that I deem the subject of sufficient importance to justify us in giving to it the careful attention that will enable us to claim its justification or rejection.

Being a breeder of Jersey cattle, my attention has been turned to this subject by the pecuniary interest involved. It is especially the case with this breed of cattle, that the males, as a rule, possess but little value, while the females are very valuable. Under these circumstances we naturally desire the propagation of females, and feel a certain degree of disappointment and dissatisfaction when we find a male where we had hoped to secure a female calf. We naturally wish that we knew how to secure a different result; in other words, that we knew how to determine the sex in breeding.

If the above theory be correct, we have the whole matter in our own hands; for we may keep such a number of males that they may never be overworked; in addition to this, we may keep them in such a condition of flesh and blood, by proper feeding and care, that they shall always be warm, strong, and potent in the sexual act.

We may then make assurance doubly sure, by keeping the female from the male until she shall have passed the meridian of sexual excitement, and her desires for the male shall have begun to abate. When under all these conditions, if the above theory be the correct one, we should always secure a heifer calf. And having succeeded in this a sufficient number of times to give us confindence in the theory, we might still further verify it by changing all the conditions, when we ought to have the opposite result. I trust I have now shown that this theory, which I do not claim as my own, but which I am now engaged in verifying as above, is susceptible of demonstration, if it be the correct one. My observations have not as yet been very extensive; but I must say they justify me in further trials, nay, even in putting it fully to the test. I cannot expect the members of this Society, who, unlike myself, have no pecuniary interest at stake, to be interested as much in this subject as I am; but yet, as a matter of scientific research, it is not devoid of interest, and might well challenge your observation. In regard to the human race, we can well see how the contingencies and vicissitudes of life would naturally tend to the equilibrium of the sexes. The ordination of marriage securing the propagation of the race in families and from pairs, we can well see how the varying conditions of the physiological state, both in the male and the female, under all the vicissitudes of life, should tend to keep the sexes pretty nearly equal in numbers. But there are notable exceptions to this rule.

Occasionally we find a family in which all the children are boys, and again another in which all are girls, and in both cases running through the usual number of children for a family. Now here is a field for the verifying or disproving of our theory. If it be correct, we should find, upon a careful scrutiny of the parents, that the family of boys should have a mother of strong sexual propensities, or what we would call an amorous temperament, while the father should be lymphatic and sluggish. Of course, the state of health of the parents should also be taken into the account. And so, in the family where we find the children all girls, the opposite conditions should obtain with the parents. My observations thus far, in this department, have rather tended to confirm the above theory. Again, we sometimes see a man decidedly past the meridian of life, and whose physical vigor is on the decline, marry a young, or a comparatively young and vigorous woman; and in this case my observations are confirmatory of this theory, the children from such a marriage being almost uniformly boys. The case of illegitimate children might also be observed in its bearing on this subject, as the male, in this case, is usually the aggressor—young, vigorous, and impelled by an overbearing, imperious passion. Of course, to make our observations perfect in this case, we should be able to take into the account the actual physical condition, age, temperament, state of health, etc. of both the parents.

Let me now ask you, gentlemen, at the conclusion of this paper, to give some attention, as you may have opportunity, to the subject of it. Let us have it on the list of subjects for investigation, and, from time to time, let us see what bearing the facts we may be able to observe and collect may have, either toward its confirmation or overthrow.

—It is a significant fact that the greatest age is frequently attained by those who have all their lives had rough and scanty fare, but have lived chiefly in the open air. Thus very aged people are frequent among the Irish peasantry.

Hospital Reports.

UNIVERSITY OF THE CITY OF NEW YORK.

CLINIC OF WILLIAM M. POLK, M. D.,

Professor of Obstetrics and the Diseases of Women and Children.

Ulcer of the Rectum.

The first patient whom I shall show this morning, gentlemen, has rather a complicated history, but at the same time one sufficiently clear to give you a very good picture of one of the most distressing conditions to which human nature may be subjected; and yet, on account of the simplicity of the treatment, and the immense relief from suffering to be derived therefrom, it is one of the most satisfactory conditions we have to deal with in practice.

In reply to my questions she gives the following history: She is thirty-three years of age, married, has had four children; her health was good until after a miscarriage, two years ago last fall, since which time she has not been well. She says she has been troubled with the womb, and with back trouble. She thought there was a good deal of inflammation of the womb, with now and then a little bloody discharge. Her courses occur too often, there sometimes being only a week interval, sometimes two or three weeks, sometimes the normal interval. The back trouble to which she alluded is a pain up through the bowels, which continues all the while, compelling her to lie in bed most of the time, as she cannot sit down. She also has very severe pain at the time of movement of the bowels, and loses a good deal of blood, and a sort of throbbing pain continues about an hour after the passage. Her general health has suffered severely. She considers the pain connected with the back or bowel as the worst, and says it practically wears her out.

Now, gentlemen, I have questioned this patient as to her difficulty somewhat at length, and the above is what I have been enabled to obtain from her. It is important, however, in examining the patient, not to ask too many questions suggesting the answer you expect to receive, and following them to infer what you think is the trouble before you have obtained the full history; but, if possible, get from them the symptom or symptoms which they consider most serious, or which trouble them most, letting them, as far as possible, tell their own story without suggestive questions. Here we find that the trouble is not a single one, but she attaches most importance to the rectal symptom. Having thus obtained the patient's own statement of her case, you will proceed to the physical examination.

Now, on asking her whether she has any difficulty in passing her water, she says she has; that sometimes she cannot make it; sometimes going as long as a day and night without urinating. There is not much pain connected with the act. It, therefore, partakes of the character of retention of the urine.

As a result of all this suffering, for she does suffer a great deal, the woman is broken down. She has become incapable of performing her duties without great fatigue; although naturally a great, strong woman, she has now become a nervous, hysterical, irritable person. There is a certain amount of disorder connected with pretty much all of her bodily functions—the function of the bowels, digestion, etc. You see, therefore, a patient in about as distressing a condition as you will often meet with.

Now the question arises, what is the cause of all this? And before we can answer this question we shall have to make a physical examination. We will place the woman in Sim's position, the best position for examining the rectum, in either male or female, and then try to introduce the finger. You see this effort is strongly opposed by the spasmodic action of the sphincter muscles, which are all the more irritable and resisting on account of the diseased condition present. If we did not proceed with extreme care all our attempts at the introduction of the finger would prove of no avail, since the parts are so sensitive and the patient stoutly and persistently resists us. You observe that as soon as I have introduced my finger into the external sphincter she begins to cry out with pain. I have now reached the neighborhood of the internal sphincter, and upon the posterior aspect of the bowel there is a ragged surface, which is exquisitely sensitive. This, then, is sufficient to account for the trouble which she refers to the bowel.

Now let us inquire into the cause of her irregular menstruation. Passing the finger into the vagina, I find that its posterior wall below and next to the rectum is very sensitive. The uterus appears to be a little enlarged. The irregularity in menstruation seems to have been due to a fungous condition of the lining membrane of the organ, following, probably, upon her miscarriage. It is not impossible that a small portion of the placenta may have been retained.

We find nothing abnormal with the urinary passages, and it is probable her retention of urine has been due to an irritable state of the bladder and urethra, caused by her general hysterical condition, from long continued suffering.

We find, then, two troubles existing in this patient, the first pertaining to the uterus, and the other to the rectum. We will first direct our attention to the latter. The lesion of the rectum may have originated simply in a slight break of the mucous membrane, at which point there afterwards set up an ulcerative process, which led, of course, to hyperæsthesia of all the nerve filaments that may be involved, and you know that there is scarcely any other portion of the body which is so freely supplied with nerves as the tissues immediately in the neighborhood of the sphincter ani. The consequence of this ulceration and hyperæsthesia is, of course, extreme irritability of all the muscles of the parts, so that upon the slightest intimation of a painful process, such as the introduction of the finger into the rectum or a movement of the bowel, these muscles are thrown into a spasmodic state of contraction. This serves to increase the pain, so that you have one condition reproducing the other, until the general system is finally affected and suffers. The case is analogous to one of long continued toothache.

In some cases you will find that the lesion is extremely minute, probably no larger than a fissure such as one often has upon the lip in cold weather. Again, there may be an ulcer as large as your thumb nail. In the course of time the ulcerated surface becomes hypertrophied, its edges raised or the centre depressed; in fact, you may find a variety of pathological appearances connected with these lesions; but there is one complaint that will always exist, namely, hyperæsthesia; a hyperæsthetic condition of the nerves distributed to the base of the ulcer.

Formerly this condition of things—the pain excited by these sensitive nerve filaments—was treated by dividing the muscular fibres, the sphincters, whose contraction kept up the compression and motion in the parts; but latterly it has been treated by stretching the muscles to such an extent as to produce a temporary paralysis. In order to perform this operation the patient must be under the influence of ether, and, indeed, it often happens that one is unable to make a satisfactory examination of the patient's condition until she is put under the influence of an anæsthetic. You saw that the examination which I made on this patient a moment ago was by no means satisfactory in enabling me to determine the exact condition of the entire bowel at its lower part, but having examined her before, on a previous occasion, I know pretty well the exact state of things. The pain inflicted by stretching the sphincter is entirely too great to admit for a moment of our doing the operation without an anæsthetic, although before this agent was widely employed the treatment was sometimes resorted to. The surgeon gradually introduced all his fingers up into the rectum, and then doubled up his fist and suddenly, in that position, jerked it through the sphincter. You can imagine the suffering of the poor creature who might have happened to be the patient.

After oiling my fingers, they are gradually introduced into the rectum, and outward traction force is made in either direction, with the hands, gradually increasing it so as to stretch and not rupture the fibres of the sphincter. If sudden and too great force is used the muscles will be lacerated to a greater or less degree, and there will be incontinence of the fæces, for we seldom find rupture of this muscle tending to repair thoroughly. Unquestionably, even as carefully as I have stretched the parts, certain individual muscle fibres have been ruptured, but they have been ruptured, not in masses, but at different points of the circle, and the damage done to the muscle as a whole is very soon repaired, and after healing it will have regained nearly its normal power. Four or five minutes may be employed in the stretching process, passing the finger around from one side to the other of the muscle, so as to have the distention equal in all directions.

Having stretched the muscle sufficiently, there is no speculum which will enable you to examine the parts better than it can be done with Sims', aided by an ordinary depressor. Upon the posterior wall I find the location of the difficulty, which consists in an ulcerated surface about as big as the nail of my ring finger. It is superficial, involving the mucous structure; in its centre is a small depression. This will require some other treatment in addition to the stretching of the sphincter which has been done, and there is none better than applying to it fuming nitric acid, washing the surface then with the bicarbonate of soda, so to prevent the too deep action of the remedy.

It is not unlikely that a second application of the acid will have to be made before this ulcer will heal. Such would not be the case, probably, if there were present simply a fissure. Ulcers of the rectum are among the most difficult we have to treat, and especially is this the case if there be also some constitutional disturbance, as syphilis, in which case the lesion is possibly due to the deposit of syphilitic material. In addition to the local treatment there should be constitutional or general treatment.

With regard to general treatment, the first point regards the bowels. These patients always require such medicines as produce soft movements. The compound licorice powder of the German pharmacopœia is good, as is also a powder made up of sulphur, the bitartrate of potash or Epsom salts, and sugar of milk. Besides these you can use the ordinary mineral waters. In this manner you will obtain semi-solid evacuations and avoid that congestion and irritation of the sphincter ani which is the great cause of the pain in these patients. In addition to this you must see that the general health is cared for. If there be failure of nutrition, besides proper diet, no remedy will be of more service than cod-liver oil. Arsenic, quinine, strychnine, and iron may be given according as they may be indicated. With regard to her uterine condition, that will be treated on a subsequent occasion.

Cancer of the Cervix Uteri.

This woman is about fifty years of age. She had perfect health until four months ago; her circumstances were passably good; she suffered no bodily aches or pains; there was no derangement of function of any of the organs of the body. She had completed the menopause about three years before, and until four months ago, as said before, her health was as good as that of any woman at her period of life. At that time, however, she was suddenly startled by a feeling of something trickling down from the vagina, and, on examination, found some blood, which continued to flow, during three or four hours, quite profusely. It then ceased, and she gave the matter no more thought, until ten days afterward, when it reappeared under almost the same circumstances, lasting this time twenty four hours. These irregular hemorrhages have continued to return, at times, from then until the present. This being the case, her general health became affected, and she was forced to come here, seeking for relief. When she came into the hospital she had the appearance of a woman who had been losing blood; but she suffered from no pain, and remarked, "Doctor, if you will stop that bleeding I will be as well as any woman here." But the moment I put my finger into the vagina I found that she was very far from being as well as any woman in the house. In other words, I found the cause of her bleeding to be an epithelioma of the cervix. Let it be your rule, gentlemen, when a woman who

has passed the menopause a year or two before, comes to you complaining of loss of blood from the vagina, to suspect cancer of the uterus, and in the great majority of instances you will find your fears verified on examination.

The usual appearances of a cancerous development on this part I have spoken about before. They are very well shown in this patient. But the point arises, what shall we do for her? There have been a number of operations proposed. In the first place, amputation of the cervix. This, of course, is based entirely upon the supposition that only so much of the cervix is involved as can be totally removed by the knife, scissors, or galvano-cautery. If, however, the disease has gone up to the vaginal junction, and invaded the deeper portions of the uterine structure, simple excision of the cervix will accomplish nothing. The only resource would be to remove as much of the diseased tissue in this way as we could, then scoop out as much as possible of what remained, using the actual cautery in order to prevent hemorrhage. This latter operation is the only one which can be adopted in the present case, for the disease has gone quite up to the vaginal junction, invading deeper portions of the uterus and neighboring glands. All we can do, therefore, is to get rid, as far as possible, of this fungous-like growth, which is so sensitive to the touch that even a jar is sufficient to produce a loss of blood. If we can remove this satisfactorily, the loss of blood may be checked so that her general health may improve.

With regard to another operation, total extirpation of the uterus, I merely mention it, as it was suggested in the present case, and would say that it was absolutely forbidden on the discovery of involvement of the lymphatics of the pelvis. Total extirpation of the uterus is to be resorted to only in case all the diseased tissue can be removed.

You will observe that after removing this tissue with the scissors, I am able to check hemorrhage by means of the actual cautery, which is kept constantly ready for use during the operation, as considerable hemorrhage may occur at any moment. Of course, we do not perform this operation with any idea of curing the disease, but simply, as far as possible, to relieve symptoms.

KENTUCKY SCHOOL OF MEDICINE.

CLINIC OF J. M. MATHEWS, M.D.,

Professor of Surgical Pathology and Diseases of the Rectum.

Syphilis.

In going through the wards to-day, I selected three cases of rectal trouble to present at this clinic. They are each of special interest, and represent three different types of rectal affections. I have only questioned them as to the symptoms, preferring to complete the examination before the class. It is best always, in these cases, to allow the patients to tell, in their own way, the symptoms and history, in fact everything that relates to their individual case, hence, I shall proceed to question this man concerning his condition. How old are you? Thirty-two. How long have you complained of rectal trouble? Three years or more. What is your principal trouble? Persistent constipation. Do you take purgatives to relieve that? Yes, sir. What do you take? Compound cathartic pills. How many do you take to cause an action? At present six or eight, about 10 o'clock in the morning. Are these sufficient to cause an evacuation? They produce a small, watery action, about 6 or 8 o'clock in the evening. Do you mean to say you pass no natural fæces? I don't understand your question. I mean do you, with or without these pills, ever have a healthy and natural action? I don't. How long since you had such an action? I would say six or eight months. Before that did you have, as a constant thing, natural evacuations? No sir; only occasionally. If you took no purgative would your bowels move at all? No sir. If you take a larger dose than the six or eight cathartic pills you speak of, does it move your bowels more freely? No sir. How do you know? Because I have tried as many as four drops of Croton oil and ten grains of blue mass at a time. What effect did these have? They produced the same small, watery action. Do you have any pain when your bowels move? No sir. Do you pass any blood or mucus? None at all. What is the condition of your general health? I am partially paralyzed. What do you mean by that? The paralysis is of my legs; it is difficult for me to walk. How far can you walk at a time? Likely six or seven squares, at a moderate gate. Do you ever fall? Yes sir. Can you get up again without assistance? Not easily. Can you get into a street car? Not without assistance. What do you weigh? About 180 pounds. Is this your usual flesh? It is perhaps somewhat above. How is your appetite? Very good. Do you indulge it? I do. Do you sleep well? Yes sir. Your general health, then, outside of the trouble named, is good? My general health is, but I havn't finished telling you about this other trouble. The paralysis, I suppose you mean? well let's hear it. I am unable to hold my water as I should. You mean you pass it too frequently? Yes sir, sometimes with difficulty. Have you ever a desire to urinate, and upon attempting to do so, find that you cannot? Yes sir, that's it; often. Are you capable of an erection? No sir; I haven't been for three years. Have you been a healthy man all your life? In a general way, I have. Have you had syphilis? I had it about four years ago. What symptoms had you then? I had a sore, and after that got well, I had sores upon my body and scalp. Did your hair come out? Yes sir, and my whiskers too. Then it was about a year after this attack that you noticed the paralysis and the constipation? Yes sir. Were you treated for syphilis? I took medicine for six months or more. What did you take? I don't know; it was large bottles of something.

Now, gentlemen, we have an explicit history of the patient's trouble, given by himself. It is a question in my mind whether he should be in the medical or the surgical ward. It would not be proper, however, to send him back without an examination for rectal trouble. He presents some symptoms of stricture of the rectum. It is a singular fact that this man has not passed a fecal evacuation for five or six months. This fact alone demands an examination of the bowel.

In making an examination for rectal trouble

of any kind the patient should be placed upon a hard bed, upon the left side, with the knees drawn up toward the abdomen. It is a good plan to have the bowel thoroughly cleansed by an enema just before the examination. This having been done, I introduce my finger, which, you notice, elicits no pain. The rectum appears to be capacious, even to the extent of five inches; in other words, no stricture is detected by the finger. Shall we now say that this man has no stricture? By no means; while in the majority of instances we find stricture of the rectum located within reach of the finger, it is by no means rare to find it located some distance beyond. I now introduce the rectal bougie, No. 7. This instrument is made of rubber, and it does not require to be warmed, being perfectly pliable. This enters about six inches up the gut, where there seems to be an obstruction before it; but you will remember I have frequently told you that the folds of the gut may obstruct the entrance of an instrument. After a persistent trial here, however, you see it will not enter further. Can this be a stricture? The examination indicates that it is. But you will remember this man has said he has no discharge from the rectum. If a stricture exists it is natural to suppose some ulceration also exists, and hence some discharge. Another reason for eliminating stricture is the seat of obstruction. It usually occurs within two or three inches from the anus. Failing to pass this instrument further, the case must be investigated further. The speculum will be of no service here, for with no instrument of that kind yet devised can we see as far into the bowel as indicated by this obstruction. So the next alternative is to introduce the hand into the rectum, in order to detect, if possible, by digital examination, the true state of affairs in the bowel. To do this the sphincter muscle or muscles must be entirely broken down. An anæsthetic must be administered. * * * *

It has been contended by very many of the authorities that the hand cannot be introduced into the rectum of the male. Contrary to this doctrine, I have introduced my hand into the rectum of three different subjects. One was a case very similar to this, in which persistent constipation had existed for years in a syphilitic subject, and I found a stricture in that case, located at the entrance of the sigmoid flexure, fully eight inches up the gut. I dilated it with my fingers, and the patient made what might be called a good recovery.

This is a strong man, and in order to dilate the sphincter muscles sufficiently great force will be required, and to accomplish it successfully different methods have been suggested. That usually practiced is to insert the two thumbs, and by gradual dilatation toward the ischii, overcome the muscle. I have been more successful by oiling the back of my hand, introducing the ends of my fingers all together, and with all the force at my command push the hand beyond the sphincter. You see I am using much force here now, yet I fear no evil result, and I feel the muscle giving way and the hand is introduced. * * * I now find abundant capacity of the lower portion of the rectum, while above, the folds obstruct the passage of my fingers; but by pushing them gradually aside, I am satisfied that I could push my hand on further. There is much danger, however, in this procedure, even if the bowel be in a normal condition. I have gone sufficiently far to satisfy my mind that no stricture exists.

Now, gentlemen, let us ask ourselves what is the cause of this man's obstinate constipation. Let us recapitulate the important symptoms in his case. He had syphilis, undoubtedly, four years ago; a year after he began to complain of paralysis of the lower extremity; he passes his water with difficulty; he has been impotent for two years.

From this recitation of facts, substantiated by the examination just completed, which excludes stricture, I have no hesitancy in saying that his paralysis is due to a syphilitic deposit in the sacral plexus of nerves. From your knowledge of anatomy, you know the distribution of the branches of this plexus to the lower extremities, to the penis, and to the bladder, etc. As an effect of that pressure in the sacral plexus, we have not only the paralysis of the lower extremities, but it extends, in fact, to the bladder and the penis, and we are justified in the conclusion that it extends to the bowels, and in consequence of this arises the inability to pass the fæces.

Dilating the muscle, as we have done here to-day, will have no bad effect, for the reason that it must have been more or less irritable, and after a free dilatation the patient will be able to pass any fecal matter that may accumulate with less difficulty than before.

What shall be the future treatment of the case? He tells us his general health is good outside of the symptoms narrated. Satisfied that his symptoms are directly traceable to the syphilitic cause, he will be placed upon an anti-syphilitic treatment. The object in doing this is to cause an absorption of the deposit in the sacral plexus of nerves. You would at once say, then, that iodide of potassium should be given this man, and you would undoubtedly be correct in the assertion. Therefore we will direct that he have thirty grains administered three times a day. He remarked to me in the ward that his bowels felt as if they were dead. This was an apt expression.

To aid in producing the regular evacuation we must get up some peristaltic action of the bowel. The liver in a subject like this is usually torpid, therefore, to meet two indications we will give the patient a pill composed of $\frac{1}{8}$ gr. calomel, 2 grs. of extract of aloes, and one-fourth of a grain of podophyllin, to be taken three times a day. We shall watch the effect of this pill, and if it is favorable we shall then give him strychnia, looking to his paralyzed condition. It is a question whether electricity would be of any service to this patient. He will come before the class next week.

Coccyodynia.

Case 2.—This woman presents herself for examination, and therefore we will allow her to recite her symptoms, as we did in the other case. How old are you? Twenty three. Married? A widow. Have any children? One. How old is it? Three years. How is your general health? Tolerably good. What do you complain of? Pain in my back. Where? At the lower end.

Is that all you complain of? Yes sir. Have you any piles, or anything of that kind? I think not. Do you have any pain when your bowels move? No sir. Do your bowels move every day? Not every day. Do they ever come out? No sir. Do you ever lose any blood from the bowel? No sir. Have you any discharge whatever from the bowel? No sir.

Well, gentlemen, it would appear from this woman's recitation of her trouble that we are to be cheated out of any rectal case for to-day, and if it were not for the reason that I have seen so very many complain of symptoms which do not seem to indicate rectal affection, and upon examination found that the same did exist, I would not subject this woman to an examination. But under the circumstances I feel justified in examining the case before you. No abnormal appearance is present around the anus externally, and when I introduce my finger she complains of no pain. I press upon the bowel in front, laterally, and you notice she flinches, and says I hurt her. Yet I feel no ulceration, and she has not said that she discharged blood or mucus at any time. Pressing my finger against the coccyx you notice that she complains of great pain. Catching the bone between my finger and thumb and raising it, elicits more pain. This would seem to indicate that the trouble is located in or around the coccyx. How long, madam, have you suffered from this pain? I had a mild attack of it after the birth of my child, three years ago, which lasted a week or two and passed off; this last attack came on about four or five weeks ago. Is the pain constant? No sir. When is it greatest? When I attempt to get up from a sitting position or move about. These symptoms, together with the facts elicited by an examination, lead to the conclusion that this is a case of coccyodynia. This may be due to many causes; among these we may mention hemorrhoids, fissure of the anus, and other rectal troubles. Of course under these circumstances, it is but a reflected pain, and when they are relieved the pain of the coccyx ceases. Women who have borne children are most likely to suffer from coccyodynia. It may be caused also by fracture, or dislocation, or disease of the bone. It may be a rheumatic affection of the tendons, or of the muscles, or it may be a neuralgia of the nerves supplying the part. Sometimes the affection is only slight in degree, sometimes very painful. It lasts for an indefinite period. The treatment of this disease must necessarily vary. If you are satisfied, from an examination of the symptoms, that it is rheumatic, the remedies usually given for rheumatism are appropriate—quinine and salicylic acid, etc. If it is due to neuralgia, the remedies for neuralgia are appropriate. The application of a belladonna plaster or a blister over the region would be, in many cases, appropriate.

If all these means fail, and the pain continue, you would be justified in performing an operation for the relief of the patient. Of these there are two, one devised by Dr. Nott, the other by Prof. Simpson, either of which may be practiced, according to the inclination of the operator, with good results. Simpson's plan is to insert a tenotomy knife at the lowest point of the bone, passing it between the bone and the cellular tissue to the point of junction with the sacrum, and then withdraw it, making a subcutaneous division of the muscles on the side of the bone. This is to be repeated on the opposite side.

The other operation is to sever the muscles by an external incision, carefully cutting them with a pair of scissors. This is the simpler and better operation. If caries of the bone exist, its removal is advised. This should, however, be practiced as a dernier resort, only.

Editorial Department.

Periscope.

Factors of Albuminuria.

The *Medical Times and Gazette*, April 1st, 1882, comments on Professor Senator's paper on albuminuria from which we extract the following: He concludes that there may be at least three factors in the production of that condition as it shows itself in disease. These are (1) Changes in the circulation within the kidneys; (2) Changes in the membranes intervening between the blood and the urine; and, (3) Changes in the blood itself. The urine is comparable to a stream fed from two sources, which differ in the amount of water they contain, and in their composition generally, and which do not entirely follow the same laws. The one source—the transudation from the glomerular vessels—is more watery, and yields some albumen, as well as the ordinary constituents of all transudations; the other source—the secretion of the glandular epithelium in the tubules—is, perhaps, less in quantity, free from albumen, but laden with the specific substances of the secretion. A second complicity is that, with increase of blood pressure, the amount of the urine of filtration increases; but it is more difficult to detect albumen in urine thus diluted.

Thirdly, the distribution of the vessels within the kidney is peculiar, and the effect of changed blood pressure on the two sources of the secretion cannot but be unequal. Fourthly, the walls of the vessels, or other membranes, as well as epithelial cells, may be affected, as regards their nutrition, by the changes of blood pressure, and may so become permeable to albumen. Lastly, the lymph-stream in the kidney is dependent upon the blood pressure, and is not without influence on the composition of the urine. Such being the complex conditions of the problem, it is, perhaps, not surprising that there is little agreement among the various experimenters who have sought to influence the blood pressure, and

have therefrom drawn conclusions as to the pathology of albuminuria. Thus, when the blood-pressure has been raised by electrical excitation of the cervical cord, or by the production of dyspnœa, or by poisoning with strychnine or digitalis, there has been ultimately an increase of albumen. But when the series of events is closely scrutinized, it appears that the albuminuria is due, not to the increase of blood pressure within the kidney, but to a prior and initial diminution of the blood-supply, caused by a narrowing of the small vessels. The author is equally dissatisfied with the evidence when the increase of blood-pressure has been brought about by ligaturing large arteries or by cutting the renal nerves. The method of raising the body temperature of an animal in a calorimeter-box appears to him to be the most uncomplicated means of increasing the general blood pressure. Of this nature were his own experiments, and he invariably found that albuminuria was produced by a sufficiently rapid or a sufficiently prolonged elevation of the body temperature to the extent of 3° to 6° Fahr. The kidneys of those of the animals that were killed were boiled, to coagulate the albumen, and the microscopic sections seemed to confirm the otherwise probable conclusion that the glomeruli were especially the seats of the albuminous exudation.

Professor Senator sums up his criticisms and investigations, as regards the blood pressure, with the remark that the greater number of the experiments heretofore made have been erroneously conceived, and the care spent upon them has been to a great extent in vain. From the few passable experiments, and from the corroborative experiences with the human subject, he concludes that heightened arterial pressure in the kidney is by itself capable of inducing albuminuria, provided that the urine becomes at the same time more scanty than normal, from the abstraction of water by other ways. Congestion of the kidney, caused by ligature, for a few minutes, of the renal vein, produced albuminuria, and the albumen in the boiled kidney was found first in the tubules, and secondarily in the capsules. Congestion (from ischæmia) was also produced by ligaturing, for a corresponding period, the renal artery; it was also produced by ligaturing the ureter. In all the instances where congestion was produced by one means or another, albuminuria followed, but the albumen was not always thrown out to the same amount, or in the same part of the renal structure. The various kinds of renal congestion which can be induced by experiment have their counterpart in clinical experience.

The second factor in the production of albuminuria is the degeneration of the renal epithelium, chiefly of the tubular epithelium, but also of that which covers the glomerular tufts of vessels and lines the inner surface of Bowman's capsule. Those who consider the urine to be a glandular secretion free from albumen, must ascribe to the epithelial cells of the kidney the property of preventing transudation from the blood vessels; and those who, like the author, consider the urine to be a mixture of transudation and true glandular secretion, must also refer to a restraining power of the tubular epithelium, the absence of albumen, at least in the glandular part of the secretion. Consequently, disturbances of nutrition and of function in the tubular epithelium, or complete destruction of the latter, would permit the passage of albumen from the blood and lymph into the urine. There is an analogy for that hypothetical case in acute poisoning by phosphorus and by certain other substances. Fatty degeneration of the renal epithelium is one of the most marked points in the morbid anatomy of phosphorus poisoning, and albuminuria is one of the most constant clinical symptoms. There appear, indeed, to have been some differences of opinion as to the existence of the albuminuria; but Professor Senator shows that the weight of evidence is entirely in favor of that accompaniment of phosphorus poisoning, and he gives four experiments of his own which were quite unambiguous. Clinical experience of phosphorus poisoning agrees with the evidence of experiment. In cases also of pernicious anæmia, fatty degeneration of the renal epithelium and albuminuria go together. The albuminuria of the febrile condition is also associated with renal parenchymatous degeneration; but it is associated with other factors as well, and is, therefore, of doubtful import as regards the causation. Lastly, there is a peculiar kind of degeneration of the renal epithelium—coagulation-necrosis—which is caused by certain poisons, such as chromic acid, petroleum, croton oil, and cantharides, and is associated with albuminuria.

The third great factor of albuminuria is the abnormal condition of the blood. This was the earliest assigned cause of albuminuria; and it was, in fact, the humoral doctrine which most naturally came to the front at the time when albumen in the urine was first detected by Cotugno. But that doctrine can no longer be maintained in its original sense. In Bright's disease, including the amyloid and the congestive forms, the immediate cause of the albuminuria is not a change of the blood, but of the kidney. There are, however, cases of albuminuria in which there are neither tissue changes in the parenchyma of the kidney, nor circulatory disturbances; and in such cases it may be said that changes in the blood are the cause. The blood changes causing albuminuria may be not only in the albuminous substances of the blood, but also in the proportion of its constituent parts.

Syphilitic Inoculations Caused by a Sucking Infant.

In the *Lancet*, *April* 1st, 1882. Dr. Simeon Small reports the following: In January, 1881, a woman, aged 45, presented herself at the Infirmary, on account of a sore on the upper part of the right breast, near the nipple, caused, she said, by suckling a strange child. An enlarged gland was found in the axilla. The core was indurated, and was diagnosed as a hard chancre, which healed under treatment, but was followed by constitutional symptoms. The following August she entered the Infirmary for iritis of the left eye, when the following interesting history was elicited. The daughter of our patient, M. D., and who we will speak of as A. K., aged 26, has been twice married. As the result of the first marriage, there were two children. One child

died at four months, of bronchitis; the other is living and healthy. The husband died of consumption. In September, 1880, she was delivered of a healthy child, to the father of which she was subsequently married. Up to this time she had enjoyed perfect health. When, however, her baby was three weeks old, she went out as wet-nurse, and for one night suckled her own and her employer's baby, after which her baby was sent away, and she confined herself to the strange one. The strange baby she described as being about three months old, emaciated, suffering from diarrhœa, with a "rash" on its body. This was the ninth child and all the others had died. After two weeks, during which she nursed this child at night, and only from the right breast, she left the situation, and returned to her own child, whom she resumed nursing. She soon after noticed a soreness at the upper part of the right breast.

In consequence of the discomfort this gave her when the child was put to the breast, she again sought relief from her mother, who partially suckled the child for her. This child, we are told, suffered before long from a sore place on its upper lip, followed by "thrush," and the eventual death of the child on April 23d, 1881.

We return now to our original patient, M. D. It would appear that she had almost weaned her own infant, when she commenced to suckle her little grandchild, and that she used the left breast exclusively for her own and the right for her daughter's child. We have before traced this patient as applying at the Infirmary with the primary sore on the right mamma, and referred to the subsequent constitutional symptoms. Previously to this time it would appear that she had had excellent health. Has been the mother of ten children, of which number seven are living. Of the three who died, one succumbed at eight months, to measles, another at two years and a half, to smallpox, and the third at ten months, to whooping-cough.

Shortly after she came first under my observation, I desired her to bring her daughter, A. K., who happened then to be in Sheffield, to me. She did so, and the facts respecting her acting as nurse were elicited. I do not recollect finding a distinct scar on the breast, but there could be no doubt of her having been syphilized; she had suffered from "secondaries," and a specific roseolous rash was still on her. I may mention here that while, as I have stated, the baby of the daughter, A. K., died, the baby of the mother, being nearly weaned, and at the time she was suckling her grandchild being nursed at one breast only, is still alive and well.

I will now refer to the facts I have been able to learn respecting the suckling baby and its family, and this I am enabled to do by the kindness and courtesy of the family medical attendant, who has freely communicated with me on the subject; but I should add that he has not long been in professional attendance, and the family history was, in a measure, hidden from him. At first the infant appeared healthy; it was brought up by hand, and except a tendency somewhat to snuffle, seemed to be getting on well until it was nearly three months old. Diarrhœa then set in; it became emaciated, and, it is said, assumed an "old look." As this was the last of nine children, all the others dying in the manner to be hereafter mentioned, the parents were particularly desirous of rearing this one, and with this object it was decided to procure a wet-nurse. It happened that in another family a young woman had, just at this time, been wanted also for the same purpose. The parents, in that instance, made every inquiry as to the character and otherwise of the nurse, and were perfectly satisfied. In consequence of the baby, however, not taking to this woman's breast, she at once left. Mr. X., the father of the infant in question, also satisfied himself as to the girl, and engaged her to suckle his child. The medical man says she was the picture of health, and so, indeed, was the baby. After a few days, from a Thursday to a Tuesday, in consequence of her milk disappearing, she left, and the Sheffield young woman, A. K, came upon the scene, with the baby in the condition previously described. A roseolous rash immediately appeared. The nurse was warned of the risk she incurred, and desired if she remained, as the parents were anxious for her to do, to be particularly careful and cleanly as to the breast. These directions she neglected. There could be little doubt now that the child was suffering from specific disease, and under treatment with mercurials it improved, and is now quite well. All Mrs. X.'s previous children had died. The first is stated to have died from hemorrhage of the umbilicus; the second and third were stillborn at seven months; the fourth, fifth and sixth lived until four or five months, and died, it is said, of some chest affection (?). The seventh died at nine months, the eighth was stillborn at seven months, and the ninth mentioned in this paper. Recently (October, 1881) another child has been born, and is up to the present apparently healthy. Little is known about the subsequent history of wet-nurse No. 1. Our search after her has only elicited that her child died, and she herself has left the neighborhood.

The foregoing cases appear to be of interest, not only from the mode of inoculation, instances of which have previously been recorded, but from the number of the sufferers. It is unfortunate that we have been unable to trace the wet-nurse No. 1, not, as must be evident, that she could have been the originator of the infection in our cases; but it would have been interesting to have ascertained if she too had suffered in like manner to A. K. and M. D. Her infant, we certainly learned, had died, but this may have resulted from inoculation or otherwise. The prime source of the infection appears to be clear. The disease was undoubtedly manifest in Mrs. X.'s baby, when A. K. went to suckle it, and the appearance of a distinct specific rash not later than a week after the wet nurse No. 1 first suckled the child precludes the possibility of her having inoculated the baby, and consequently, the others referred to in this paper. On the other hand, the condition of Mrs. X.'s baby was more that of congenital syphilis, to which the evidence of the material history of premature births, etc., affords support, and would indicate the suckling baby as the innocent cause of infecting A. K., her child, and its subsequent death, and through this latter of inoculating M. D. It will have been observed that A. K. for one night suckled her own child

and her employer's baby at one breast, and this fact, of course, renders it doubtful whether A. K.'s baby was infected from Mrs. X.'s infant, or from its own mother.

Resection of the Spinal Nerve.

The special correspondent of the *Medical Press and Circular*, writing from Paris, says:—

M. Tillaux occupied the whole meeting of the Académie de Medécine with a communication, which, from its novelty and the interest attached to it, merits to be cited in full. A woman, æt. 35, entered in November, 1879, La Charité, presenting an affection not yet described. When her head was supported and maintained in a certain position she felt nothing abnormal, but immediately that the head was abandoned the patient felt it drawn in an irresistible manner, in a position always the same. The chin turned to the left, and the head, by this rotatory movement, reclined on the right shoulder, as in ordinary wry neck, due to retraction of the sterno-mastoid muscle. However, there was no appreciable muscular contraction. The patient, who seemed utterly powerless to control this kind of spasm, experienced excessively acute pain in the left side of the neck, and at a point correspond ng to the first cervical vertebræ. M. Desnos, in whose service the patient was, considered the affection to be functional spasm of the muscles of the neck, and treated it for several months by the continued current, the application of the magnet, metallotherapy, etc., but without the slightest benefit, and the patient left the hospital a greater sufferer than when she entered. All work having become impossible, she applied, in May, 1880, for admission to the Hôpital Beaujon, when she was placed under the care of M. Tillaux. Three weeks afterwards, M. Tillaux thinking that the sternal branch of the sterno-mastoid muscle was the cause of this curious kind of torticollis, decided upon the resection of its tendon. The operation in itself was successful. The wound healed rapidly, but the situation of the patient remained exactly the same, and he requested that something more should be done. It was then M. Tillaux thought of resecting the spinal nerve. This nerve, almost immediately on its exit from the posterior foramen, divides into two branches, one, inner, anastomoses with the pneumogastric, and the other, extern, passing first close to the angle of the jaw and across the parotid gland, reaches the middle of the sterno-mastoid muscle, where it divides into two branches, one of which supplies the muscle above named, while the other descends lower down to reach the trapezius, where it loses itself. These two muscles are animated by this external branch of the spinal nerve, but not exclusively. These two muscles play the principal part in true torticollis, and one might naturally hope to arrest functional spasm by modifying their nerve supply. Already stretching had given good results to Mosetig, in an operation he had practiced on a priest. But M. Tillaux, by an experiment in the dissecting room, found that when the spinal nerve was drawn upon, the movement was communicated to the bulb. This fact made him prefer resection to stretching, as he was afraid of producing a lesion of the bulb. Accordingly, on the 15th of December, an incision was made over the posterior border of the sterno-mastoid, and soon the spinal nerve was brought into view, and seized with a blunt hook and resected for the distance of an inch. Immediate union of the wound, with antiseptic dressing, concluded the operation. As to the results, they are satisfactory. The patient is not completely cured, but she enjoys an evident control over the spasm. M. Tillaux thinks that at the end of a couple of months the affection will have altogether disappeared. The question might be asked if the resection might not in some way affect phonation? Claude Bernard, it was true, had considered the spinal nerve in all its divisions as a nerve of phonation. According to him, the external branch, on contracting the trapezius and the sterno-mastoid, contributed to complete and prolong the movements of the thorax during singing, but his patient has not given any evidence of the voice being modified. M. Guèrin observed that the case of M. Tillaux was remarkable, in that resection and simple section of the ninth nerve was practiced. The latter operation was done by him several times in similar cases, which he considered should be classed under the title "spasmodic torticollis," which Amussat failed to distinguish from true torticollis produced by muscular retraction. For the class of torticollis by retraction, the tendons of the affected muscles should be cut, whereas in spasmodic torticollis, on the contrary, M. Guèrin operated by section upon the centre of the muscles themselves, in order to modify their innervation. M. Tillaux has just shown, that in cutting through the centre of the sterno-mastoid muscles, the spinal nerve was included in the section. M. Tillaux replied that he was well acquainted with cases of spasmodic torticollis, but it did not seem to him that his case could be classified under that head, for where there is spasmodic action the movement is *brusque*, and the muscle feels hard to the touch. In this patient the operation of the rotatory movement was gradual, and the slightest obstacle arrested it, and palpation could not discover any contraction of the muscles. This discussion was concluded by M. Guèrin, who confessed that he was inclined to admit that among the spasmodic wry necks, the case of M. Tillaux formed a new kind; but where there is spasm there is always muscular contraction, and subcutaneous section of the muscle can always be tried, not only without danger, but with advantage.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——We have received the April number of the *Alienist and Neurologist*, very ably edited by Dr. Charles H. Hughes, of St. Louis. It contains many interesting articles: among others we note the following: "On Different Aspects of Aphasia," by Dr. Mickle, of London. "Aspects of Alcoholism," by Dr. Wright, of Bellefontaine, Ohio. "The Simulation of Insanity by the Insane," by Dr. J. G. Kiernan, of Chicago. "Laws for the Inebriate," by Dr. T. D. Crothers, and much other valuable matter, original and selected.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	**$5.00**
Half-Yearly Compendium of Med. Science,	**2.50**
Reporter and Compendium, - - -	**7.00**
Physician's Daily Pocket Record, - -	**1.50**
Reporter and Pocket Record, - - -	**6.25**
Reporter, Comp. and Pocket Record, - -	**8.25**

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

THE ADVANCEMENT OF MEDICINE BY RESEARCH.

On March 28th last, a largely attended meeting was held at the College of Physicians, London, to form an "Association for the Advancement of Medicine by Research." Sir WILLIAM JENNER presided and offered the following resolution:—

"That with the view of bringing the legitimate influence of the medical profession more effectively to bear on the promotion of those exact researches in physiology, pathology, and therapeutics which are essential to sound progress in the healing art, an Association be formed, to be called 'The Association for the Advancement of Medicine by Research.'"

He stated that several meetings of members of the medical profession and others interested in the advancement of medical knowledge had been held, to deliberate on the best means of inaugurating an association for the advancement of medicine by research, and it had been determined to call together a representative meeting of men interested in medicine and the sciences on which it rested and with which it was allied, to express or not their approval of the scheme to be submitted to them. Although there were already a number of societies to which those who had made scientific researches might communicate their results, there was at present none to guide research, and this want he hoped this Association would supply. It was not intended that the Association should limit itself to any one object, but being founded on a very broad basis, should carry on its work in all departments. He hoped it would exert its influence on the study of therapeutics, and investigate the effects of sewer gas and foul air upon the human constitution, and in such studies they would want the combined work of physiologists, pathologists, and chemists. Another subject that lay ready to hand was the influence of light, moisture, subsoil, infection, and injury upon tubercular disease. If such investigations were carried out by the right men in the right spirit he was confident the benefits to humanity would be incalculable. Every advance in physiology was a stepping-stone to an advance in pathology, for the latter is founded on the former; and he trusted the proposed Association would aid and stimulate professed physiologists. For the attainment of these objects there was no desire to infringe or evade the law of the land, or even to ask for a repeal or a modification of any part of it.

But it would be the duty of the Association to watch most carefully the workings of existing laws, and to see how far they attain their object, and how far existing machinery may unnecessarily hinder the work of physiologists. He considered it most important that the Association should be guided by men for whom time had tempered zeal with discretion, and who would be able to restrain the ardor of younger men. Such men would be able and would endeavor both to enlighten the public and lessen their morbid sensibilities. It was deemed desirable that the public should be informed that the future progress of medicine rested upon science. Although medicine has at times made great strides by some fortunate or accidental experiment, yet the real substantial advance depended on true scientific research, and on the habit of mind it fosters. The public also need to be taught the

necessity for experiments on living animals, the advantages obtained by them, the amount of pain inflicted, the number of times the experiments require to be repeated, and if the experiments produced any effect upon the moral nature of the investigator. These were the sensible views suggested by Sir GEORGE JESSEL. The Association will consist of representative members from all the scientific professions. Medicine is a comprehensive *so-called* science, depending, for its advancement, more upon the contributions received from collateral sciences than does any other human study or pursuit. Such associations as this will tend to render unnecessary the use of the term *so-called*; they will result ultimately in making medicine really an exact science, in making it "Truth ascertained." Desultory and single handed investigation will be no longer the rule, but united and concerted action will enable us to deduce definite laws for the recognition and treatment of disease, to which laws the exceptions will be as few as they now are in the more exact sciences. Let us hope that this excellent precedent will be followed in our own country. Every large city ought to have a similar association, when we might reasonably hope to place our science on a solid basis.

UNIVERSITY OF PENNSYLVANIA.

For some time past the Alumni Society of the University of Pennsylvania has been endeavoring to obtain recognition from the Trustees; they asked to be represented in that body, and to have a voice and an influence in the management of their Alma Mater. At last their request has been heard and granted, and as a consequence the Alumni have taken fresh interest in the welfare of the institution. It has now been resolved that, for every third vacancy occurring, the central committee of the Alumni, representing the graduates of the several departments, shall nominate a certain number of candidates, from among whom the choice shall be made. This action cannot be too highly commended. No one can possibly feel that peculiar love for and interest in the welfare of any institution that belongs in an especial manner to the graduates. Who are better calculated to look zealously after its interests? and, in truth, when we descend to the level of common justice, who are so much entitled to representation in the management of an institution of learning, as those who have through years been associated with it; who have contributed to its material welfare and have received from it the foundation for that very knowledge which has in after life rendered them capable of directing the affairs of others. The Provost, who is himself a distinguished alumnus, is now practically the presiding officer of the Board of Trustees, and it has been well for the University that such an innovation was made. This new change is but another step in the right direction, and while commending it highly, we would also advise all other institutions of learning to do the same, at the earliest practical date.

DISEASE-PRODUCING THEATRES.

The *Medical Press and Circular* calls attention to the dangers of theatres as ordinarily constructed. The want of ventilation is already familiar, and need not be further dilated upon. The point to which attention is to be especially directed is the danger from the sudden draughts of cold air. Every one who has ever been in a crowded theatre can recall how very warm it soon becomes, and how over-heated and feverish he feels. When in this condition, the curtain is raised at the beginning of an act, a strong current of cold air becomes perceptible throughout the house. This sudden change is very liable to produce disease; it will naturally determine the blood from the heated surface to the internal organs, and produce congestion of them. There are many bad points about the construction of our theatres, but none really of greater import than this one. It would seem that it would be almost if not quite impossible to overcome this objection, for the following reason: The air in the auditorium is naturally of a higher temperature than that on the stage, or behind the curtain, because it contains more persons and gas lights, and is warmer; therefore, when the curtain is raised, the cold air will, of course, rush,

or be drawn out to supply the place of the warm, thus creating a draught. To avoid the ill effects of this draught (until architects have devised some means of preventing it) we would recommend the following procedure. Have always at hand some loose wrap, and as the curtain starts up, put it about the body, and keep it there for a few minutes, until the cold air becomes mixed with and as warm as that to which you have been accustomed; then remove it and repeat the process at the commencement of every act. In addition, it would be well for those subject to catarrh, or who have weak lungs, to hold a handkerchief over the nose and mouth for a few minutes, for the same purpose. These precautions should also be observed on leaving any warm building on a cold night, and going out into the chilly street. "Great oaks from little acorns grow," you know; so do fatal diseases from trivial causes spring. These slight causes can often be avoided, or their potency aborted, by equally slight precautions. Therefore, will it be well for physicians to be ever on the alert to give these slight hints of warning, that to so many, unfortunately, seem too insignificant to be worthy of a moment's consideration.

"THE FOLLIES OF FASHION."

Just now the medical profession of England are carrying on an energetic crusade against the health-destroying follies of fashion. The movement is quite universal, and seems to give promise of good accomplishments. Recently Mr. Frederick Treves (*Lancet*) delivered a lecture on this subject, which promises good results, since it was a plain, intelligible, matter-of fact exposition of the results of the deadly style of dress in vogue among fashionable women; and was listened to by many of the so-called leaders of fashion. The speaker, among other good points, said: "There is, however, no tyranny so oppressive as that of the *mode*. A woman might as well be dead as out of the fashion. There is something mysterious in this submission, because it is perfectly well known that the rulers of fashion are not its leaders. If the facts were fully and plainly stated, the fashionable intelligence would not announce that at a particular assembly Lady Little Waist wore gorgeous apparel, of such and such material and made in such and such a style, but that Messieurs or Mesdames Snip and Stitch *exhibited a costume* on the person of Lady L. W." This statement will hold equally good in our own country. It is a dismal fact that women who desire to be fashionable seem to imagine that, to accomplish their purpose, they must resort to the most outrageous vagaries of dress, such as are calculated to seriously injure their physical welfare. The terrible habit of spending an evening in an overheated ball-room with low neck and short sleeve dresses, and then going out into the cold night air with but little extra covering, cannot be too strongly condemned. It is a wonder that in every instance such imprudence is not rapidly followed by pneumonia. A medical journal is the proper place for the discussion of such points, since physicians possess great power and influence to mitigate the evil. The family physician, in nearly all cases, is a trusted friend and confidential adviser, in addition to his professional rôle. His wisdom is considered great, and his words carry much weight. If, then, physicians will earnestly combat the evils of dress, and lose no opportunity to battle against them, much good can be accomplished. For foundation stones in this warfare, let them take the following points: Flannel to be always worn next the skin; clothing to be loose and suspended from the shoulders, so as not to constrict any portion of the body; shoes large and roomy; warm covering to the feet, and very little to the head. With these fundamental principles, intelligent common sense will supply the superstructure of advice in every case. Let us sincerely trust that physicians will recognize and utilize the undoubted powers they possess to reform the dress of our women, and to banish from the world much of the sickness and deformity due to our present abominable system or style of fashionable attire. To do so is a duty that physicians owe to their fellow creatures, and he who neglects to utter this little word of warning is, morally speaking, criminally negligent.

Notes and Comments.

Iodide of Potash in Pneumonia.

In the *Moniteur Thérapeutique* we read that M. Riebe has tested, clinically, this medicament, which M. Schwartz considers capable of arresting the progress of pneumonia. M. Riebe used this medication exclusively in thirty-seven cases of pneumonia; in twelve cases there was double pneumonia, and in three others the disease was complicated with pleurisy.

In some cases he was able to commence treatment during the first twenty-four hours, administering every second hour a tablespoonful of the following solution:—

℞. Potass. iodid., ℥iss
Aquæ, ℥vij. M.

A bladder containing ice was placed over the region of the thorax, corresponding to the affected portion of the lung. Of the thirty-seven patients treated, but one succumbed, and in this case the pneumonia was double. M. Schwartz, in 10 per cent. of his twenty-eight cases, succeeded in arresting the malady after the second day.

The results obtained by M. Riebe, although less brilliant, are satisfactory, and should lead to the further employment of a remedy which is at least innocuous in its action.

The preceding year M. Riebe simply followed the expectant method in twenty-two cases of pneumonia in young, healthy soldiers, and found that, generally, the malady was of longer duration than when treated by iodide of potash.

Ranula.

In the *Medical Times and Gazette*, April 1st, 1882, Dr. C. B. Lockwood offers the following note on a case of ranula. It seems to be generally agreed that in almost every case of ranula the cyst has no connection with the ducts of the salivary glands. This point is supposed to be proved by the fact that in nearly all cases a probe can be passed into the sub-maxillary (Wharton's) duct, and no communication discovered between it and the cyst. This method seems to exclude Wharton's duct in a satisfactory manner. There are other salivary ducts in the immediate proximity to which it cannot be applied. There is no particular reason why the ducts of the sub-lingual glands should not be capable of distention and conversion into ranula. E. W., aged fourteen, presented herself with a very large typical ranula beneath the right side of the tongue. It had only been noticed two months. The sub-maxillary ducts were not probed, but appeared free, and discharged ordinary thin saliva. A large piece was snipped out of the cyst-wall and the contents saved. They consisted of about two drachms of a very tenacious, yellow, transparent fluid, of faintly alkaline reaction. A portion was found to be soluble in distilled water, from which it was precipitated white and opaque, by the addition of acetic acid. Solution of perchloride of iron produced no claret-colored reaction; it may therefore be inferred that no sulpho-cyanide of potassium was present. Added to starch solution, and kept for some time at a gentle heat, no conversion into glucose was discovered; the fluid, therefore, contained no ptyalin; it appeared to consist of almost pure mucin.

It might be argued that the contents of this ranula may have come from a salivary gland, but have been so long in the cyst as to have become inert. If it had been originally saliva, great condensation must have occurred, and it might therefore be expected to have been made more active than usual. Moreover, these ferments do not lose their activity when kept for very long periods. A glycerine extract, for instance, remains active for an indefinite period.

It seems probable that the cyst in this case was due to the distention of one of the sublingual mucous glands.

Tubercular Ulceration of Intestine.

At a recent meeting of the Manchester Medical Society (*British Medical Journal*) Dr. Simpson showed the lungs and a portion of intestine from a case of tuberculosis. The interest lay chiefly in the close resemblance to typhoid fever. The patient, aged 21, was admitted to the Manchester Infirmary, November 17th, 1881. The health had been good up to six months before. Since then she had felt increasing weakness, but became much worse three or four weeks before admission, with cough and expectoration. Evening temperature was 104; pulse 128. There were morning remissions. Slight flattening, with diminution of resonance and some moist *râles*, existed at the left apex. Sonorous and cooing rhonchi and moist *râles* were heard, indeed, over the greater part of the chest, but the latter were constant at the left apex. The abdomen was natural, not tumid. There was no pain nor gurgling on pressure in the iliac fossa; but a few rose spots, exactly like those of typhoid, were scattered over the surface. The tongue was a little furred, but moist. The bowels were

slightly confined. The spots appeared and disappeared in successive crops through the whole course of the case. There was high temperature in the evenings, with morning remissions. On November 27th diarrhœa set in, and the motions speedily assumed the "pea soup" character. The expression, the mental hebetude, the character of the delirium, all closely resembled what is seen in typhoid. She died on December 18th. Both lungs were congested at the bases. A small cavity, of the size of a walnut, was found at the left apex; while numerous miliary nodules were scattered through the surrounding lung tissue. In the middle lobe of the right lung was a caseous mass, of the size of a filbert, with some scattered miliary tubercles. The peritoneum was normal, and also the mucous membrane of the ileum till near the lower end, where numerous small, rounded and oval ulcers were found. Their margins were thickened; the floor was formed by the muscular, and in some cases the serous coat, but there was no perforation. The ulcers extended transversely round the intestine, contrasting markedly with those found in typhoid. They extended through the whole length of the large intestine. The other organs were healthy.

"A Flesh Worm."

The following case is reported in the *Medical Press and Circular*, April 5th, 1882, by Dr. W. M. Whittaker. A girl aged 12, thin, pale, and delicate, was brought to me November 25th, 1880, with the following history: Two or three months previously a swelling about the size of a pigeon's egg appeared on the outer ankle of the right foot, causing her some pain and uneasiness in walking. By degrees this tumor slowly moved up the leg and thigh, toward the body, and thence to the right axilla. From this it traveled to the right elbow, then back to the axilla, the right breast, and finally to the back of the neck on the right side. In this situation a small dark spot appeared in the centre of the tumor, which then subsided, leaving in its place a small welt. The dark spot developed into a small orifice, and the girl, upon pressing the welt, gave exit to a grub, along with some semi-purulent matter. A few days afterward a swelling similar to the first appeared a short distance from the place last named, and again disappeared, leaving behind it a welt as before. To the touch, it felt as if there was a piece of whipcord coiled under the skin, in the subcutaneous cellular tissue. Pressure on the little swelling forced out a white grub, about an inch in length, annulated and alive. The girl said she expected the tumor would next appear somewhere in the sternal region, as she could generally tell, by an uncomfortable or sore feeling, whereabouts it was likely to appear. On December 3d she returned, and informed me that the swelling did appear, a day or two after her last visit, in the lower part of the sternum, from which it traveled to the right axilla and thence to the inferior angle of the right scapula, where it presented the usual phenomena. No cause could be assigned. All the other members of the family are healthy, and the girl enjoyed good health up to the appearance of the first tumor. As long as she was under observation, the phenomena occurred every few days. It may be noted, as a curious fact that all throughout only the right side of the body was affected. The two specimens of grub were submitted to some zoölogists, who were unable to give any definite information, beyond assigning the larva to the dipterous order of insects. The largest was 9 mm. in length, and about 2 mm. in breadth.

Sewer Gas and Puerperal Septicæmia.

Dr. John C. Ferrier reports the following cases in the *British Medical Journal*:—

Case 1.—A multipara was delivered at full term; labor normal. A few hours later she was a little feverish. The next day she had headache and slight abdominal pains; temperature 102.2° F. She continued ill for more than five weeks, with symptoms of blood-poisoning. The temperature was sometimes very high, over 105° on one occasion. After the illness had lasted a few days, she had pleurisy on the left side; and toward the end of the attack abscesses formed in the axilla, groin, labia and gluteal region. There was no sore throat and no pelvic inflammation. She recovered. Two or three weeks before her confinement the trap of the water closet became blocked, and while directing the removal of the obstruction she got a strong whiff of sewer gas and exclaimed at the time that she was afraid it would give her diphtheria. She had been feverish and ill for a week before confinement, and her husband said that she "felt so hot in bed that he was obliged to move away from her." There was no history of exposure to any other poison than sewer gas. In the same house, two years before. several of her children had diphtheria, from defective drains, but these were put to rights, and there was no further trouble until this last stoppage.

Case 2 presented much the same history as Case 1. There were no abscesses; severe rigors nearly every day; one wrist joint became red and swollen. Milk was secreted for some time

and required belladonna to stop it. She died one month and six days after confinement. There were no cases of infectious diseases in the house, nor could any fault be found with the sanitary arrangements. But a short time before her illness she had noticed a strong smell from a sewer when out walking.

Dr. Ferrier concludes by saying that there was nothing in the history, symptoms or progress of either case to lead him to suspect that any other poison than sewer gas had been at work.

Epulis, with Profuse Hemorrhages.

In the *Lancet*, Mr. J. W. Hulke, reports the following case:—

A little blonde machinist, aged sixteen, with wax-like pallor, and scarcely able to stand without support, was admitted into Queen's ward on the night of July 29th, 1880, on account of very profuse hemorrhages from the mouth. Their source was a small epulis of the size of a Spanish nut, springing from the interior plates of the alveolar process opposite the right first molar tooth. The girl said that this had begun to grow three years before, soon after she had had an upper double tooth removed at the Dental Hospital. Until this uncontrollable bleeding, which obliged her to come to the hospital, she had not attached any importance to the lump, particularly as it occasioned her but little inconvenience. This molar was drawn, the epulis cut away, and the bone to which it was attached was gouged out. Bleeding, which was somewhat copious, was checked by a compress, dusted with powdered persulphate of iron. The wound healed in about a fortnight, by which time she had begun to lose her pallor. A few months since there was no appearance of a recurrence. The anatomical structure of the tumor placed it in the class of fibro-sarcoma.

Intermittent Fever and Quinine Hypodermically.

In the *Lancet*, March 11th, 1882, Dr. P. A. Smith contributes the following case: A sailor, aged 32, had been sick for three months, with continuous quotidian fever and scurvy. On the day after his admission into the hospital it was deemed advisable to test the statements he had made as to his febrile condition, by allowing him to remain in bed and giving no medicine. At 8.45 A.M. he felt cold, and at 9 A.M. his temperature in the axilla was 102° F., and at 11 A.M., 104°; after which there was a gradual decrease every half hour until 1 A.M. when it was 100.4° F. He was ordered a hypodermic injection of six grains of quinine at 8 P.M., to be repeated at 8 the following morning. It was reported the next day that he passed freely and without fever through the usual times of having the paroxysms. There was no increase of temperature and no uneasiness, and he says this is the first time he has been free from fever for the past three months. He had two injections at the same hours on the two following days, when it was noticed that the arm where the injection was given was somewhat tender, and the quinine was given by the mouth, dissolved in tartaric acid, which mixture was continued in diminishing doses for the next fourteen days. He daily gained in strength, and left, three weeks after admission, in excellent spirits. No slough or abscess marked the site of the injections, and the pain experienced at the time of injection was slight and soon passed away.

Therapeutic Action of Larkspur.

M. Benvenuti, in a memoir analyzed in the *Annales de Dermatologie*, recommends very strongly, a decoction of the flowers of larkspur (delphinium), or preferably an infusion made with four parts of the flowers to 100 parts of vinegar, against the pediculi of the pubis. Two bathings with this liquid have constantly sufficed to destroy the insects and their eggs, without inducing any irritation of the parts to which it is applied. M. Benvenuti has also found it an excellent dressing in ulcerated bubo, having a beneficial effect when carbolic solutions, tincture of iodine and iodoform had been used without result.

As the acetic infusion seems to determine slight tumefaction of the integuments, he found that three grains of the dry flowers, macerated for thirty-six hours in 100 grams of water, yielded a strongly colored liquid, which answered better for all purposes.

Fibrous Tumor Growing from Sacrum.

Mr. Francis V. McDowell reports the following case in the *Medical Press and Circular*:—

M. B., aged 45, presented herself at the Baltinglass Infirmary, suffering from a large tumor growing from the region of the sacrum, which caused her much pain and inconvenience, as she was unable to sit or lie down. The tumor sprang from the external surface of the sacrum, opposite to the promonotory of that bone. There was no evidence of fluctuation, and it seemed to be hard and firm throughout; it had a broad base, and appeared to be deeply attached to the bone. The

growth had been increasing in size very rapidly, and as the woman was anxious to get rid of it, it was decided to remove it. The woman was etherized; a long incision made over the summit exposed the fibrous nature of the tumor. The only difficulty was in dissecting it from its base, owing to the firm and dense attachment to the bone. Having completely removed the growth, the parts were brought together and dressed with carbolic oil. Some pain and numbness was experienced in the lower limbs for some days, but this entirely passed away with the healing of the wound. The woman made a rapid recovery, and was discharged from the Infirmary three weeks after the operation.

Action of Aconite.

In the *British Medical Journal*, Dr. Edward J. Tilt says that aconitine has attracted so much attention of late, that he will mention the following: A highly nervous lady, at the change of life, suffered from neuralgia. One or two attacks occurred about every week, when the pain was very severe. Six leeches applied to the temple shortened the attacks; going out of town kept them in abeyance, once, for six weeks; and the only medicine that did the same was aconite. She used the tincture of aconite, in an aromatic infusion, for sixteen weeks, beginning with five drops, and gradually increasing until she took twenty-five drops, three times daily. That one caused so great a sense of fullness in the throat that it was reduced to twenty, which caused only slight physiological effects. It kept off the attacks for two, three, and once for four weeks; but it did not in the least diminish their intensity, therefore it was discontinued. The Doctor had every reason to believe that the tincture was a reliable one, and could only account for the tolerance of such enormous doses by some idiosyncracy of the patient. It would be dangerous in the extreme to make a common practice of exhibiting such large doses.

Special Reports.

No. IV.—ADULTERATIONS (Concluded).

WATER.

Professor W. L. Dudley, of Cincinnati (Cincinnati *Lancet and Clinic*), delivered an address before the Cincinnati Medical Society, on the action of water on lead pipes, from which we extract the salient points. He presented no new features, but gave a résumé of existing knowledge.

In nearly every house in all large cities the water which is used for culinary and bathing purposes is conducted through lead pipes, yet how few are they who suffer from lead poisoning; and why? Is it because the water has no solvent action on the lead? Is it because the water is not allowed to remain in contact with the lead for a sufficient length of time?; or, is it because the water contains such impurities as precipitate the small quantity of lead which may dissolve? These are the questions with which we have to deal. A few months ago, a gentleman came to me with a sample of water, which he said his family used for bathing purposes, and that his child had suffered from peculiar symptoms indicative of lead poisoning. He, therefore, desired an examination of the water. On questioning, it was found that the water was rain water, which had been collected in an ordinary cistern and pumped into a tank, lined with lead, from which it was circulated for use. The tank was filled each night and emptied during the following day. In giving him instructions as to the manner of collecting the sample, he was told to empty the tank that night completely, fill it with water, and the next morning draw off about a gallon, into clean, well-stoppered glass bottles. The quantity brought was 3700 cc., which was evaporated on a water dish to 100 cc.; a few drops of nitric acid were then added, the solution filtered, and saturated with hydrogen sulphide. A slight dark brown precipitate formed, which proved to be lead. The quantity was small, but sufficient to condemn its use. This water fell in a comparatively pure atmosphere, not contaminated by the smoke, carbonic acid gas, etc., from the city. It was allowed to stand in the tank only twelve hours, and yet contained an appreciable quantity of lead. The first question that arises is, does *pure* water dissolve lead. Prof. W. R. Nichols states that "perfectly pure water, in the absence of air, has no action on metallic lead; if, however, lead be immersed in rain water, or in ordinary distilled water, there is almost immediate action; and if, after a lapse of a few minutes, the liquid be agitated, there will be seen an abundance of white scales of the hydrated oxycarbonate of lead. This violent action seems to be due, in some measure, to salts of nitrous acid, always present in such water, and to be effected by the formation of some nitrous compound of lead, which is more soluble in water than the oxy-carbonate. The salts of lead vary in solubility in water; one part of the sulphate requires 20,000 parts of cold water to dissolve it, the car-

bonate 50,000; the oxy-carbonate is but slightly soluble, the phosphate is altogether insoluble, the sub oxide is insoluble, the hydrated oxide is soluble in 7000 to 12,000 parts of water, the chloride in 135 parts, and the nitrate in about 3 parts of water at ordinary temperature.

Rain falling in the purest atmosphere will inevitably contain some organic matter, nitrates, and ammonia. In consequence of this class of impurities, the water has a much greater solvent action on the lead than that which contains sulphates, carbonates, and phosphates, and it is on account of this fact that we are saved from serious poisoning by hydrant water. It will be well, therefore, to avoid lead pipes when using pure rain water; when the water is from a well, stream, lake or pond, which contains considerable quantities of carbonates or phosphates, it is perfectly safe to use lead. It would seem that great caution must be exercised in the use of water. It is so liable to impurities of various kinds that it would seem almost impossible to be sure that you had it pure. Therefore, no matter how good, and sweet and pure you may *think* your water supply to be, it is a rule that ought to be never neglected, to filter every drop of water used for drinking or culinary purposes.

WINES.

Even wines are adulterated. We are all familiar with the adulteration process in the manufacture of whisky, gin, and the like, but we now note, from the "*Druggist*," the following "*doctoring*" of wines:—

Sleeman's Circular for February says that the French Government has just passed a most salutary measure, which will have for effect the diminution, if not the complete suppression of the process known as *plâtrage*, now become an almost constant custom through most of the wine districts of France, and which, from having at first been performed on a very moderate scale, has lately enormously increased till it has developed into a crying abuse. The *plâtrage* is carried on during the fermentation, and consists in merely sprinkling the grapes, as successive baskets of them are emptied into the fermentation vats, with plaster of Paris—calcium sulphate—(French *plâtre*), mineralogically known as gypsum or selenite, in fine powder. Now, the grape-juice contains several salts of potash, among which the most abundant are the tartrate and bitartrate, and these decompose when placed in contact with the calcium sulphate, forming calcium tartrate, an insoluble salt, and potassium sulphate.

In the case of potassium bitartrate, potassium bisulphate is formed.

Now, besides the salts of potash above named, the juice of the grape contains grape sugar, a nitrogenous fermenting principle, and an astringent principle, to which latter new red wines owe much of their hardness, and also a red coloring matter with which the astringent principle is intimately associated. The fermentation splits up the grape-sugar, as it is well known, into carbonic acid which escapes with effervesence, and alcohol, which remains dissolved. In pure undoctored wines, in proportion to the development of alcoholic strength, and as the wine by age tends to become more acid, potassium bitartrate separates as a crystalline precipitate, forming the chief constituent of the deposit in the casks known as lees, or when it forms in bottled wines, as the crust.

Now, the astringent principle, which in the red grape is, as we have explained, intimately combined with the coloring matter, seems to be held more or less in solution by the tartrates, and as these subside with age the wine grows less harsh, losing at the same time much of its color, and is said to ripen or grow mellow. As the astringent principle, however, disappears, the wine, if it be one of the weaker French wines, tends to run to the acetous fermentation, and this is why we frequently find a wine become sour and unpalatable shortly after it has mellowed with age and arrived at its maximum of perfection. Many a bin of valuable claret or Burgundy has thus suddenly surprised and disappointed its possessor, changing, in the short space of a few months, from fine mellow wine to undrinkable vinegar.

Now, as stated above, calcium sulphate (*plâtre*) decomposes the potassium tartrates, and by withdrawing them and substituting the potassium sulphate, tends to prevent much of the coloring and astringent matter from passing into solution, so that this so-called plâtrage is nothing more than a means employed by the Bordelais and Burgundians for giving to their wines a fictitious effect of age; and they naturally defend a practice which enables them to bring their wines sooner into the market, economizing their outlay in casks and diminishing the chances of loss entailed by keeping a large stock of wine on hand. Further, the process lends itself to fraud, permitting the wine merchants of Bordeaux and Burgundy to import the strong, harsh wines of the north of Spain and the southeast of France, which, when blended with the small, poorer wines of the hill districts of their own country, and then being *plâtrés* (that is, agitated with powdered calcium sulphate) become mild and palatable. Thousands of hogsheads of wines thus blended and doctored, are annually sold, and too often at the high rates commanded by pure vintage wines.

Under the provisions of the new Act, no wine is allowed to be brought into commerce if it contains over 30 grains of potassium sulphate per litre. Even this proportion is too large. Plâtrage should be entirely prohibited; but when we consider that wines are now often sold with 75 to 90 grains of this salt to the litre, it was time, indeed, that some measures should be taken. The merchants defend themselves on the basis of the practice being innocuous, and that, while it promotes the keeping qualities of the wine, even 60 grains of potassium sulphate could do no harm. It is the greatest possible mistake to fancy that plâtrage makes wine keep; for, on the contrary, it withdraws from it the as-

tringent princip'e, a most potent means of its preservation. For a Bordeaux merchant to contend that forty grains of potassium sulphate to the pint of wine is not or cannot be unwholesome, is a thesis which may be agreeable to his pocket, but certainly ought to be discouraged, for, to say the least, it would be prejudicial to the stomachs of delicate or dyspeptic consumers. Not very many years since a case occurred of actual death by poisoning, by the administration of a comparatively small dose of potassium sulphate, and this salt is well known in medicine as a drastic and dangerous purgative. We should, then, be most sincerely grateful to the French Minister of Commerce for the prudent forethought with which he has protected the consumers of French wines from a practice which has grown into a crying abuse, and for giving us one more guarantee for the purity of these wines, justly ranked as the most esteemed that the world produces.

The *British Medical Journal* says that a wine merchant of Salzburg was recently charged, before the police court at Frieburg, with adulterating wine. It appeared that he had purchased 3000 hectolitres of wine, which, before again selling it, he had increased to 52,000 hectolitres, by means of potato sugar, alcohol, wine dregs, and salt in large quantity. This mixture he sold at a price from three to five times the real value. He was condemned to two months' imprisonment and a fine of $125.00.

FUSIL OIL IN ALCOHOL.

The *Druggist* says that MM. CAZENEUVE and COTTON propose as reagent a solution of potassium permanganate, containing 1-10th per cent. of the dry salt. The permanganate at ordinary temperature is reduced slowly by vinic alcohol, but instantaneously by methylic alcohol. If to 10 cc. of alcohol at 20° there is added 1 cc. of the permanganate solution, twenty minutes are required before the liquid takes the yellow tint indicating complete reduction. If 10 cc. of alcohol are used containing 1 cc. of methylic alcohol, the yellow tint is instantly obtained with potassium permanganate.

CORRESPONDENCE.

Specific Treatment of Zoster.

ED. MED. AND SURG. REPORTER:—

In a recent number of the Buffalo *Medical and Surgical Journal*, Dr. John Boardman, of Buffalo, reports a case of "shingles" cured by the following:—

℞. Ac. carbol., ℥ij
Ol. oliv., ℥j. M.

SIG.—Rub well on the parts, two or three times daily.

After the second application, the burning of the parts ceased, and in a week the patient was well, only a few dry scales remaining.

Some three years ago I commenced the treatment of zoster with carbolic acid, and have successfully treated every case which has since fallen into my hands; I have come to the conclusion that it is as nearly a specific as is sulphur for scabies. I will relate one case, illustrating my mode of treatment.

July 23d, 1881, Mrs. G. called upon me for a prescription for her hired girl. From her description, I guessed it to be a case of erythema, or rhus poisoning, and sent her a solution of plumb. subacetat., for external application, and tr. fer. chlor. internally.

July 25th, was called to see the girl. Found a fine, healthy looking lass of about twenty. On examination I found an extensive crop of patches of vesicles, extending from the interscapular space over the right scapula, through the axilla, on the superior aspect of the upper arm, and on the inferior aspect of the right mamma. In fact, as beautiful a case of shingles as I have seen in a practice of thirty five years. The characteristic neuralgia was unusually severe. Of course, the lead lotion and iron drops had done no good. I immediately commenced my specific treatment, as follows:—

℞. Acid carbol., ℥j
Ung. hydrarg. nit., ℥j. M.

SIG.—Apply freely to the diseased surface, twice, daily.

Cover with cotton batting and over this oiled silk.

Internally, parvules iodide of arsenic, gr. $\frac{1}{100}$, two every two hours.

July 27th. Found smiling faces on both maid and mistress. Pain and burning all gone; eruption arrested and fading. Relief was experienced shortly after the first application. No further trouble was experienced, and in a week more not even a dry crust remained of this heretofore intractable disease.

A stronger ointment may be necessary in an obstinate case, and no harm or injury would be likely to arise if used of double the strength.

Carlton, N. Y. T.R. BAMBER, M.D.

Questions on Vaccination.

ED. MED. AND SURG. REPORTER:—

On looking over the contents of the REPORTER for December 31st, 1881, I find "Questions on Vaccination, by E. M. S." Turning over and reading the article, I fail to see a single question (except to an outsider), on the subject of vaccination.

While I am a firm believer in vaccination and the good therefrom, may I be allowed (if not detrimental to the cause) to ask a few questions?

Is vaccination, when thoroughly done, a preventive against the ravages of small pox?

Is this foul disease being wiped from the face of the earth by vaccination? Or, is it, like other fatal diseases, gradually growing less severe and fatal by natural causes and by good hygienic and

quarantine measures? Is it a boon to the human race? Or, is it a fallacy that will crumble by time and investigation, like homœopathy, calomel and blood letting? Has vaccination contaminated the blood of this and preceding generations, and done more harm than good? Did not varioloid have an existence before Jenner ever saw a cow?

Has vaccination all the prophylactic powers it is represented to have? Do not individuals and peoples have smallpox who have been thoroughly vaccinated? Do not individuals and peoples have smallpox who have previously had varioloid and smallpox? Do not individuals and peoples resist its influence without vaccination? Does vaccination destroy that virus in the system that smallpox has an affinity for, or change that germ in the blood, or change or have an indelible impression on the blood disc, or impregnate a prophylactic into the circulation which will modify or resist its influences?

Is disease, or has it ever, been transmitted by vaccination? Is bovine virus better than human virus? Did you ever know a mare or cow to have syphilis and other transmissible diseases? And are you sure that bovine virus will not or cannot contaminate the human blood? (Or, as Prof. Meigs would put it, the endangium?) Was Jenner a fanatic, and like all fanatics, governed wholly by imagination, without thorough investigation? Have you ever questioned this popular belief? Are not some physicians getting somewhat skeptical? Is not smallpox an epidemic or endemic, like diphtheria and kindred diseases, and, like them, have its run in particular localities, regardless of vaccination? Can you explain why it attacks one community and not another, both being equally exposed and vaccinated? Are not certain localities susceptible to it, and others not? Have not certain districts in Germany had compulsory vaccination for many decades, and still have the smallpox?

The freedom from this scourge in certain localities, is it not due to cleanliness and intelligence? Would not some other counter irritation or some other eruptive disease be as good a prophylactic as cowpox?

Who can compute the amount of money expended for vaccination? Has there not been enough expended to clothe the paupers of every clime? Have not physicians vaccinated because their preceptors did it, and because it was popular to do so? Have they ever dreamed of making investigation for themselves?

Was it not contended *at first* that vaccination was a prophylatic for a lifetime, then for seven years, then for only a few years, and now that it is better to vaccinate every year. And after awhile will we not have to vaccinate twice a year in order to have a sure thing; or wear a scab on our arm the year round, and be called a generation of scabs?

Is not smallpox more general over the face of the earth at the present time than it was ever known to be, notwithstanding the people's years of vaccination? Will it ever be exterminated, any more than other diseases? Are we to swallow this because the authorities say so? Or, can we prove it, beyond a doubt, to be a blessing to the human family?

These are questions to be weighed carefully, wisely, promptly, fearlessly, and conscientiously.

Sioux City, Iowa. G. W. Beggs, M.D.

News and Miscellany.

American Medical Association.

Philadelphia, 1400 Pine Street.

The Thirty-third Annual Session will be held in St. Paul, Minn., on Tuesday, Wednesday, Thursday, and Friday, June 6th, 7th, 8th, 9th, 1882, commencing on Tuesday, at 11 A.M.

"The delegates shall receive their appointment from permanently organized State Medical Societies, and such County and District Medical Societies as are recognized by *representation in their respective State Societies*, and from the Medical Department of the Army and Navy, and the Marine Hospital Service of the United States."

"Each State, County, and District Medical Society entitled to representation shall have the privilege of sending to the Association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half that number: *Provided*, however, that the number of delegates for any particular State, territory, county, city, or town shall not exceed the ratio of one in ten of the resident physicians who may have signed the Code of Ethics of the Association."

☞ Secretaries of medical Societies as above designated are earnestly requested to forward, *at once*, lists of their delegates.

SECTIONS.

"The Chairmen of the several Sections shall prepare and read in the general sessions of the Association, papers on the advances and discoveries of the past year in the branches of science included in their respective Sections. * * *"—By-Laws, Art. II, Sect. 4.

Practice of Medicine, Materia Medica, and Physiology: Dr. J. A. Octerloney, Louisville, Ky., Chairman; Dr. D. J. Roberts, Nashville, Tenn., Secretary.

Obstetrics and Diseases of Women and Children: Dr. H. O. Marcy, Boston, Mass., Chairman; Dr. C. V. Mottram, Lawrence, Kan., Secretary.

Surgery and Anatomy: Dr. —— ——, Chairman; Dr. W. A. Byrd, Quincy, Ill., Secretary.

State Medicine: Dr. A. L. Gihon, U. S. Navy, Chairman; Dr. J. H. Sears, Waco, Texas, Secretary.

Ophthalmology, Otology, and Laryngology: Dr. —— ——, Chairman; Dr. J. Solis Cohen, Philadelphia, Secretary.

Diseases of Children: Dr. S. C. Busey, Washington, D. C., Chairman; Dr. Wm. Lee, Baltimore, Md., Secretary.

Dentistry: Dr. D. H. Goodwillie, New York City, Chairman; Dr. T. W. Brophy, Illinois, Secretary.

☞ A member desiring to read a paper before any Section should forward the paper, or its *title* and *length* (not to exceed twenty minutes in reading), to the Chairman of the Committee of

Arrangements, at least one month before the meeting.—*By Laws.*

Committee of Arrangements: Dr. A. J. Stone, St. Paul, Minn., Chairman.

Amendments to the By-Laws—

Offered by Dr. D. H. Goodwillie: Art. II, Sec. 8. Permanent Members; strike out the words "but without the right of voting."

Offered by Dr. J. H. Packard: Regulation II, par. I, to read "as Permanent Members or members by application."

Regulation VI, line 4, strike out 5 and insert 10. Second paragraph, lines 4 and 5, strike out all after "publication" to and including "Association," and insert "publication."

Regulation IX. Add new paragraph: Members by application shall consist of such members of State and county societies, in good standing, as shall make application in writing for admission. They shall simply have the right to receive the Journal on the same terms as other members."

Regulation IV, paragraph 6, strike out all from "see," in line 8, to "and" in line 9.

Regulation V, paragraph 3, after "published" insert "in such manner as the Association may direct." WILLIAM B. ATKINSON, M D.,
Permanent Secretary.

Pennsylvania State Medical Society.

All delegates and others intending to be present at the meeting of the State Medical Society are requested to so notify Dr. Wm. Varian, Chairman, Committee of Arrangements, Titusville, Pa.

A Rebuke to the New York State Medical Society.

The following resolutions were adopted by the St. Louis Medical Society, April 1st, 1882:—

Resolved, That the St. Louis Medical Society, while it desires to accord the broadest freedom to medical investigation, and recognizes fully the right of individuals to form and hold private opinions, hereby declares that it regards with disfavor any steps taken to lessen or obliterate the distinctions and safeguards between an honorable practice of medicine founded upon science and that founded upon any of the current delusions and exclusive medical systems of the day.

Resolved, That a copy of this resolution be forwarded by the Corresponding Secretary to the New York State Medical Society, to the Permanent Secretary of the American Medical Association, and to several specified Medical Journals.

WM. DICKINSON, M.D., *President.*
A. H. OHMANN-DUMESNIL, M.D., *Rec. Sect'y.*

Philadelphia County Medical Society and Homœopaths.

At the stated meeting of the Philadelphia County Medical Society, held April 19th, 1882, the following resolutions were adopted:—

Resolved, That this Society reaffirm its adherence to the principles of the Code of Ethics of the American Medical Association, and declares that, in its opinion, for a physician to extend professional recognition to irregular practitioners, is to patronize and encourage irregular practice; and is alike inconsistent with honesty of purpose and the pursuit of medicine as a science.

Resolved, That this resolution be referred to the Pennsylvania State Medical Society, at its next annual meeting.

Another New Congress.

It has been resolved to call together a "Congress for Internal Medicine," to convene next April, at Wiesbaden. Professor Seitz has undertaken all the preliminary steps relating thereto.

Items.

—A chair of Morphology is to be established in the University of Cambridge.

—At a meeting of the Royal College of Physicians of London, on Monday, April 3d, Sir William Jenner was unanimously re-elected President of the College for the ensuing year.

—The Germantown *Telegraph* is responsible for the following: A country physician of limited sense and "limiteder" education, was called to see Mr. R.'s little boy, who was quite ill. He gave some medicine and left, promising to call on the following morning. When he arrived Mr. R met him at the gate and informed him that the child was convalescent. "Convalescent?" said the doctor, "convalescent? Then if he is that bad off you'll have to call in some other physician; I never treated a case of it in my life!" and with that he mounted his horse and departed.

QUERIES AND REPLIES.

Subscriber.—Formula for Infusion of Golden Seal. Take of golden seal, bruised, one troy ounce. Boiling water, a pint, macerated for half an hour in a covere vessel, and strain.

A. McM.—Cuticura ointment is a secret preparation, and we do not know its constituents.

A. O. S., Pa.—The strength of the nitrate of silve solution is given, in the article you refer to, as *a 30 per cent. solution*—which means a solution of 1-30.

J. N. R, Pa., asks whether any of our readers have ever heard of twins living to maturity, and both having families.

MARRIAGES.

BRINCK—BRAMAN.—In New York, on Tuesday, April 18th, 1882, at the residence of the bride's mother, by the Rev. Dr. John Hall, Dr. William Brinck and Adelaide, daughter of the late William H. Braman, all of that city.

GLADISH—OPPELT.—On Wednesday morning, April 12th, at the bride's residence, in Logoo ee, Ind., by Rev. W. H. Shaw, Mr. J. W. Gladish, Attorney-at-Law, of Petersburg, Ind., and Miss Louise A., daughter of Dr. E. A. Oppelt, of Logootee, Ind.

KIRBY—HILTNER.—In this city, on Thursday afternoon, 20th inst., by the Rev Wm. B. Wood, D.D., at the residence of the bride's mother, No 222 Oxford street, G. Stewart Kirby, M.D., and Miss Kate Ida Hiltner, both of this city.

PALMER—STANLEY.—At the home of the bride, April 3d, by the Rev. E. H. Boynton, Dr. G. S. Palmer, of Waterville, Mass., and Miss Mary E. Stanley, of China, Ont.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1315.] PHILADELPHIA, MAY 13, 1882. [Vol. XLVI.—No. 19.

Original Department.

Lecture.

SIMPLE MITRAL STENOSIS.

BY M. DREYFUS-BRISAC,

Physician to the Paris Hospitals.

Gentlemen:—The discussions which occupied the attention of the scientific world forty years since, regarding the symptomatology of mitral stenosis, and the great divergency of opinions which then reigned concerning its physical signs, are no longer remembered to-day. There was no longer any foundation for this controversy, from the moment it was admitted that simple, uncomplicated mitral stenosis is a rare lesion, being associated almost always with more or less marked insufficiency. As, on the other hand, the distinction between stenosis and insufficiency seems to be but of minor importance in the physiological pathology of the case, since the two lesions follow identical laws in their evolution, practitioners, in the end, no longer attempted absolute precision in a diagnosis of purely anatomical interest, and fell back on the comprehensive and very convenient term of mitral disease or lesion, which was considered sufficiently precise for all clinical purposes.

This opinion certainly corresponds to reality in the great majority of cases, and mitral lesion is the habitual type of "chronic heart disease." Have we not, however, gone too far, in almost denying a place among diseases of the heart to simple stenosis, as has been done in theory, particularly by foreign authors, and in practice by most practitioners?

There has been of late years some tendency toward reaction, commenced by M. Durosiez, in his interesting memoir in the *Archives Generales de Medécine* (1877) and continued in the theses of M. Marshall (1879) and of Marien (1880) both elaborated in Prof. Hardy's service, and though succinct, bringing forward certain clinical particularities which merit careful consideration.

Besides the common double lesion, stenosis with insufficiency, there seems to exist a variety of mitral stenosis which merits special description, particularly as regards its etiology and course. It is true that the elements on which to found such study are as yet, in great part, wanting; but it is none the less interesting to call your attention to certain unexpected results which are in contradiction with generally received opinions.

The etiology of this affection has received most attention. Durosiez had already shown that simple mitral stenosis is much more frequent in females (46 cases in women to 15 in men); this particularity has been confirmed by all the statistics collected in the thesis of M. Marshall, written under the direction of M. Landouzy.

In 100 cases observed by M. Landouzy, 85 were in women and 15 in men; Duckworth, in the St. Bartholomew Hospital Reports, Vol. xiii, says he met with 78 cases in women to 21 in men. The personal observations of M. Marshall show 76 per cent. of the cases as occurring in women. Finally, collecting together all the statistics, we find a percentage of 70 for women to 30 for men.

Although all these researches have not been undertaken with this special object in view, and several authors may have confounded the double

mitral lesion with simple stenosis, it is still plainly evident, from this notable percentage in a large number of cases, that the latter affection is much more frequent among women.

It is true, that many practitioners had already remarked a predominance of the mitral over aortic lesions in women; but no author had attributed to sex so marked an influence in the development of these alterations.

It may be said in general, that simple, uncomplicated stenosis is an affection peculiar to young women, for it forms no exception to the well-known law that mitral lesions belong particularly to the first period of life.

Very often it dates from childhood; unfortunately precise knowledge on this point is wanting; because, evidently, stenosis is more liable to pass unrecognized in young subjects than the other organic diseases of the heart, and it is thus rendered difficult to establish its period of development.

The point the most obscure in the etiology is concerning the influence of rheumatism, and in general, of maladies having a tendency to affect the endocardium, on the production of mitral stenosis.

While Duckworth found rheumatic antecedents in 60 per cent. and Durosiez in 50 per cent, of his cases, other authors, and particularly Hilton Fagge (Reynolds' System of Medicine), Landouzy and Marshall, admit, with Grisolle, that mitral stenosis is oftenest developed slowly and insidiously, without any possibility of demonstrating at any period the existence of rheumatism or arthritic manifestations.

We should incline willingly to this conclusion, but with great reserve, for nothing is more frequent than slight and incomplete manifestations of rheumatism in childhood, from simple chorea to torticollis or pulmonary congestion.

On the other hand, it is evident that the infectious diseases, the eruptive fevers particularly, may have some part in the etiology of mitral endocarditis.

Such a lesion may remain for years latent, being slowly organized, and yet have its source in one of the maladies common during childhood.

But extremely little is known concerning the influence of the different fevers, particularly of typhoid fever, in producing heart troubles.

It is at any rate certain that the primary causation or pathogenesis of mitral stenosis remains obscure; for in what manner can be explained the incontestable predisposition of females to this affection? We naturally seek the solution of this problem in the anatomical and physiological conditions special to women, and are led to incriminate either pregnancy or menstruation.

If it be true, as has been shown by Durosiez, that the morbid phenomena are oftenest observed after pregnancy, there is no proof that this condition has had any part in producing the cardiac alteration; ordinarily pregnancy only accentuates a lesion which up to that period has remained latent.

As regards the explanation put forward by M. Marshall, it does not seem entirely without foundation.

"The predominance of mitral stenosis in women, she says, may be due to the comparative narrowness of the left ventricular orifice and to the composition of the blood, which is, in all probability, peculiar during the period of sexual activity."

In this theory, the assimilation of the blood of females, during the period of genital activity, to that of rheumatic patients, on account of its deficient alkalinity, must be regarded as more than hypothetical.

The anatomical consideration invoked by M. Marshall has greater weight. Bizot has, in effect, demonstrated that the mitral orifice, under normal conditions, is narrower in women than in men; whence exaggeration of blood pressure at this point, which consequently becomes a place of election for inflammatory and degenerated alterations.

This peculiarity is the more interesting, as stenosis of the aorta, close to its cardiac origin, is also more frequent in females, a fact on which Virchow founded his theory of chlorosis.

If this last affection is, at least, in part, of congenital origin, yet remaining latent until the period of puberty, why should not the same thing happen for this variety of stenosis, which has many points of resemblance with chlorosis?

It is generally admitted that mitral stenosis cannot long pass unperceived; that its existence is early shown by functional disorders, which draw attention to the condition of the heart, and finally that it rapidly gives rise to asystolic manifestations. Death, according to generally received opinions, supervenes in a few years, six or seven at the furthest.

Is not this picture more sombre than reality, particularly as regards uncomplicated stenosis? and, on the other hand, is it always possible to recognize the organic alteration with such facility?

Many clinical observations show that the lesion may remain many years latent or give rise to but slight and fugacious derangements, such as slight dyspnœa on exertion, palpitations, epistaxis

(Durosiez), all phenomena common among young, healthy girls at the period of puberty.

Often, it is true, the signs of pulmonary trouble are more marked; there is a tendency to bronchorrhea, with slight but repeated hæmoptysis, which call attention to the state of the heart. But even under these conditions how frequent are the errors of diagnosis.

At the début of the sexual period in young girls, the menstrual flow disappears entirely for several months, or is frequently obstructed; the patient becomes pale, takes on a chlorotic appearance, is easily put out of breath, catches cold at the slightest change in the weather, and often complains of abundant expectoration; when, then, in connection with all these symptoms, hæmoptysis appears, the attending physician necessarily thinks it is the début of tuberculosis. Auscultation of the lungs reveals here and there foci of fine râles, while physical examination of the heart remains almost negative, the signs observed being so slight that they are considered to be simply functional, and due to the neuropathic condition of the patient.

Thus is constituted, to use the expression of M. Germain Sée, a latent cardiac affection, of either dyspnœic or hæmoptoic character, and the young girl, who, for that matter, presents hardly any of the general symptoms of heart disease, is for years treated for tuberculosis.

For, notwithstanding all the entirely theoretic considerations of pathological physiology, which deny any durable compensatory action to the left auricle, this latent period may last a long time if no perturbing medication be instituted.

But this state of equilibrium, necessarily unstable, will be broken, and things take on an entirely different appearance, from the moment the heart is accidentally overworked.

Such is the case for men of dissipated habits or exercising a fatiguing profession; and thus may undoubtedly be explained the greater gravity and the more rapid progress of the disease in men.

Such is particularly the influence of pregnancy; many of the cardiac symptoms observed at this period, and generally attributed to functional hypertrophy of the heart, are in reality due to the existence of this form of mitral stenosis, which had remained almost or quite latent up to the period of pregnancy.

From the moment the heart is, as it were, forced, all the general symptoms of mitral disease are successively produced; it is, however, oftenest by intense dyspnœic manifestations, or very abundant hæmoptysis, that the asystolic period commences.

Very gradually the heart dilates, secondary insufficiency is developed, and from that period the double mitral lesion is constituted, with its usual clinical signs. The physician who then sees the patient for the first time can but affirm the existence of mitral disease, without suspecting what has been the course of the morbid process.

This explains how this variety of mitral stenosis has so often passed unrecognized, and why its nosography is as yet imperfectly elaborated.

Communications.

DIABETES MELLITUS.

BY PH. M. SCHIEDT, M.D.

Read before the Northern Medical Association, February 24th, 1882.

At the very threshold of our inquiry we are met with complications, difficulties, and obscurities; and though this disease has been supposed to be known to the ancients, from the first century, and diagnosticated fully by Willis, in 1674 and by Morton, in 1675, yet to-day the subject is all confusion; not even have we arrived at a satisfactory state in nosology; the various authors are as much at variance with their classifications as they are with theories, pathology, and therapeutics.

One will classify this disease as pertaining to diseases of the liver; a second to the diseases of the alimentary canal; a third to urinary affections; a fourth to the nervous system; a fifth to diseases of pancreas; a sixth to the kidneys; a seventh to general or systemic diseases; while still another class do not consider it worth while to make any subdivisions, calling it "accidental," because, as they say, it may occur from injuries, falls, a gouty diathesis, and even that very many old people, by virtue of their decrepitude, are diabetic.

Its etiology and pathology are as dark and obscure as any disease we are called upon to treat. Finally, its prognosis and therapeutics are as discouraging and unreliable as in tuberculosis and carcinoma. At the present enlightened stage of medical literature and science, with all its modern appliances, we are confronted with the question: "What do we know about diabetes?" and the humiliating answer must go forth, from every conscientious physician who is called upon to treat this sometimes very chronic disease, "we know very little." Therefore, it behooves us, as physicians and guardians of health, as well as in the interest of science, and the further advanc-

ment of individual knowledge, to be ever on the alert for what may enhance or seem to enlighten our understanding of this persistent, though not very common, disease; any facts or any line of treatment, or any drug, that seems to offer success should be recorded for our mutual benefit.

For this reason I will now briefly record a case of diabetes mellitus that recently came under my care and observation, where it seems that I was successful in the treatment adopted, with such other remarks and notes as I was able to collect during the short time that has been at my disposal for the preparation of this paper; any shortcomings you will kindly bear with.

On December 3d, 1881, I was called to see Mrs. K., aged 40, who presented the following symptoms:—

She told me that for some time, about three months, she had been feeling unwell; was emaciating frightfully, although she had what she supposed a fair appetite; she felt always fatigued; did not wish to take any medicine, and, in consequence, neglected to send for a physician sooner than when I was called. When I saw her she complained of excessive thirst, profuse micturition, at times accompanied with incontinence of urine, and a burning sensation, having an erythema about the vulva and the meatus urinarius, and some parts of the thigh, accompanied with intense itching, for which she principally called me in. She was peevish, had flushes to the face, had a worn, distressed countenance; her tongue had a dry, red, yet fissured appearance. She had a dry, harsh skin; complained of chilly sensations, and stated that her eyesight was failing. I was furnished with some of her urine, which was slightly colored, resembling water more than urine; its sp. gr. was 1.050, and with several tests gave the reactions of a great quantity of sugar. The urine was sticky to the hand, like molasses. She also passed a large quantity, at first from 10–12 qts. in twenty-four hours. My diagnosis was diabetes mellitus. What could have been the etiology of this case, I was unable to trace.

Etiology.—The etiological data of this disease recorded by the authors seems to be nothing but confusion. It is said that this disease is not known to occur in any other animals but man, and, therefore, Benardt inclines to the theory that it is due "not to the pathological change or disease of the liver, but depends upon the nervous derangement of the liver due to enervation?" It occurs most frequently in adults from 25 to 65 years; the ratio of males is 3 to 1 between 30 and 40, while the same ratio holds good in females from 10 to 30; between 10 to 20 the number of females affected by this disease is greater than that of the males in the same decade, as well as that of the females in the two succeeding ones. It is found more commonly, at a later period, in persons among the higher walks of life, such as private gentlemen, the clergy, lawyers and doctors. It has occurred in very young and in the very old. Griesinger found, in a table of 618 cases, 4 under 10 years, and 16 from 70 to 90. Hereditary predisposition is denied by some, as unfounded in practice, yet some records by well authenticated authors do not admit of any doubt that hereditary influence has something to do with it, even if it only can be traced rarely. While in some cases, parents and children have had the disease, yet the larger part of children *escape it*, or its transmission may pass over in one generation to be found in another. Bouchardat found it in a brother of one of his patients, who had no idea that he was affected. Dr. Prout met it in an uncle, a brother and a sister of the same family; and another family where *seven* had the affection.

It is said that this disease hardly ever occurs in negroes, while it is very common among the Jews; such as are bankers. It is rarely observed in Holland, Russia, Brazil and Central America; its appearance is very much oftener in England, Germany, France, and especially in Scotland and Ceylon. The exciting causes recorded in the books are one mass of multiplicity, yet in very few cases are we able to make them out clearly. Injuries to the head, and especially concussions of the whole body, and injuries of the spinal column; softening and degeneration of the brain or medulla oblongata; excessive mental exertion, grief, depression, sexual excesses and also *sexual continence*, as reported in the Medical and Surgical Reporter, January 21st, 1882, by Dr. H. C. Yarrow. Exposure seems to be a fertile cause, especially during the menstrual epochs. It may occur during pregnancy and lactation, and is said also to arise or follow diseases of the pancreas. Prentis found, in five cases out of nine of fatty degeneration of the pancreas, diabetes mellitus. In cirrhosis of the liver, in phimosis, in intermittent fever temporarily, in impotence and in aged people without any apparent disease. It is also produced artificially in poisoning by strychnia, woorara, chloroform, and carbonic oxide, and in puncturing the floor of the fourth ventricle. Finally, but not least of all, a fruitful etiological source for this disease is undoubtedly intemperance (the bane of civilization and the curse of homes).

Symptomatology.—The brightest feature about this whole subject is doubtless its symptomatology. Though a vast array of symptoms are generally given, yet with a few pathognomonic signs we are enabled quickly to diagnosticate this affection: such are frequent micturition, excessive thirst, rapid emaciation, a dry, fissured tongue, with a urine of high specific gravity, ranging from above 30, from its incipiency, and the response to the chemical tests for sugar. Dr. Roberts says: "If a child is found masturbating suspect diabetes mellitus."

Among the symptoms enumerated by the various authors are excessive thirst, polyuria with painful micturition, voracious appetite, anorexia, rapid emaciation, the red, fissured tongue, with longitudinal streaks along the dorsum, and especially at the edges; sometimes it feels sticky to the touch and appears to the patient as adhering to the palate; the teeth may become loose in their sockets, and the gums are often found spongy and bleeding easily. We often have a dry, furfuraceous skin, even at times intolerable itching, with excoriations about the external genitals; so that if we have pruritus at the external genitals or anal regions, especially in women and children, it behooves us, as Dr. Roberts says, to examine the urine; constipation, with various dyspeptic symptoms, follow in quick succession. They often have chilly sensations at various parts of the body, so that Pettenkoffer and Vail found that diabetic patients lose the power (which healthy persons possess) of storing up oxygen in the body during the night, for utilization during the day. Loss of sexual appetite and power is often noticed; whether due to this or other causes is hard to say. Klebs asserts that in diabetes the liver is universally enlarged. Stock and Frerichs say it is due "to the prolongation or new formation of the secretory cells of the liver." The nervous system seems to be greatly disturbed. We find a peevish disposition, an easily irritated temperament; the memory often fails, and the patient frequently becomes melancholic; cramps are very common, especially at night. We may have hyperæsthesia, and also partial anæsthesia. Trousseau mentions amblyopia, total failure of vision, and cataract; while Brunton speaks of presbyopia and total failure of sight following or complicating this disease. The quantity of urine passed is very largely in excess of its ingesta, sometimes amounting to 80 and 100 ounces per diem; while Dr. S. D. Gross (Diseases of Urinary Organs) has recorded from two to four gallons in twenty-four hours. Aitken says it has reached, in some cases, thirty or more pints daily. Dr. Elliotson, in his Practice of 1844, speaks of a case where it was *fifty-two* pints daily. Its specific gravity may rise as high as 1.040–50, while Bouchardat has seen in one case, recorded by Trousseau, the specific gravity as high as 1.074.

I have used in my case Trommer's, Moore's also the fermentation tests; over night I found the bottle filled by what I presume were the "Tarulæ cerevisiæ." I also used the subnitrate of bismuth test mentioned by Dr. Tyson. I would particularly draw your attention to this test, as it is easily carried out, and seems to be quite reliable. Only a small portion of the bismuth is placed in the tube with the diabetic urine, and boiled for a few moments; if sugar is in the urine we will have a *black deposit* with a black solution, where if there is no sugar it will remain light gray. The only objection I have to this test is the disagreeable odor emanating from it while testing; I do not think that Dr. Tyson speaks of this, and it is unlike anything that I ever perceived before; I am at a loss to what to compare it.

Although pathology of the different diseases has been greatly revolutionized since Virchow, Benhardt, Rindfleisch, and others have become eminent in this branch of science, yet to-day the pathology of this affection is still very much shrouded in dark obscurity, and we know not what theory to believe, for the various pathologists are at variance (with each other), and often contradictory. Brunton says, "the presence of sugar in the urine, as an abnormal constituent, has been long known; but the pathological processes which it indicates are only now, thanks to the labors of Benhardt, Czan, Eckhardt, Flint, Gusk, Pavy, and others, beginning to be clearly understood." Even to-day we find diabetes ranged in the text-books as diseases of the kidneys and albuminuria, when we know that these organs are not at fault.

Niemeyer says the theory which holds that "it is due to the alkalinity of the blood, presupposing that the sugar or glycogen is formed *in* the blood constantly, has been disproved." The fermentation theory, which supposes that the excess of sugar is due to the abnormal conversion of amylaceous matter into sugar, he says is untenable.

Dr. McDonnel has advanced the theory that the "hepatic (dextrin) is not converted into sugar, but united with nitrogen to form a new protein compound resembling casein."

Benhardt leans to the prevailing theory of

modern pathology *which attributes the glycogenetic functions to the liver*, where *diabetes* may be due either to *increased introduction of sugar* or *to diminished destruction* of it, or to both of these together, *but adds, that it depends upon the nervous derangement of the liver* (hepatic cells), due to *enervation of the same*, and says "*if it was in our power to galvanize* the *sympathetic nerve, we would have the best treatment of this disease.*

Teherinoff says: "*The liver sugar is not made from the glycogen*, but on the contrary *glycogen is formed from the sugar which arises in the liver.* Hence, instead of glycogenetic (sugar forming) it should be called "glycophthinium" or (sugar consumer). *If the liver loses its capacity to convert the sugar* into "*glycophthinium*," *it remains in the blood and diabetes mellitus follows.*

In Ziemssen's Encylopædia we find the theory that diabetes is due simply to hypertrophy of the glandular parenchyma, when it is probably connected with an increased and accelerated *formation* of glycogen in the hepatic cells. And according to Stock and Frerichs it is due to the swelling of the liver, and that it may also be due to the prolongation of *new* formation of the *secreting cells.*

Niemeyer states that the puncture of the floor of the fourth ventricle does not depend upon functional abnormality of the kidneys, as sugar is not found in them, but is excreted from the blood. I think I cannot do better than to extricate from this labyrinthine confused pathology, what is the resumé in Reynolds' System of Medicine. "Diabetes may arise, 1st, from increased formation of sugar, due to (*a*) excessively rapid digestion of starch or sugar; (*b*) to failure or imperfection in the glycogenetic function of the liver, and possibly to some extent, also, of the muscles; (*c*) to increased transformation of glycogen into sugar, due to accelerated circulation through the liver, or a larger proportion of ferment in the organ or the blood. The circulation may be quickened, either by increase of the general arterial pressure, or by dilatation of the vessels of the liver, and especially of the hepatic artery. Increased blood pressure may be due to muscular exertion, such as occurs in epilepsy, or to contraction of the arterioles, such as is caused by impeded respiration, exposure to cold, cholera, and Bright's disease; the hepatic vessels may be dilated reflexly; irritation applied to the vagus, either at its ends in the lungs, liver, or intestine, in its trunk, or at its roots in the medulla, or to the cerebrum, cerebellum, pons, and probably some of the sympathetic ganglia. They may also be dilated, and the current in them accelerated, by section of their vasomotor nerves at any point between the medulla and the liver, provided that the interspinal vasomotor nerves are not also divided, and the supply of blood so much diminished that no increase in the hepatic circulation follows the section. Increased formation may also occur in the muscles.

2d. Diabetes may also arise from lessened combustion, due either (*a*) to insufficiency of the ferment which should convert the sugar into lactic acid and glucose; (*b*) to an altered quality of the sugar which enables it to resist the action of the ferment, or (*c*) to diminished circulation through the muscles preventing the sugar from coming sufficiently into contact with the ferment.

The therapeutics of this disease seem at present more varied and less encouraging than its mixed up etiology and pathology. From its very inception the treatment has been as varied and empirical as carcinoma and tuberculosis. Many drugs and varied lines of treatment have been used, but none with perfect success. The rich materia medica seems to be powerless and useless against the stubborn chronicity of this affection. Niemeyer and Pavy refer to carbonate of ammonium, bicarbonate of sodium, in from ʒj to ʒiv doses, to opium, belladonna; Roberts mentions codeia in ¼ to ½ gr. doses. Mr. Richardson, of England, speaks of peroxide of hydrogen, of tr. iodine 20 to 30 gtts., also of Fowler's solution from 3 to 30 gtts. Having read that Dr. Da Costa used the fl. ext. of ergot in diabetes insipidus, I thought it would be worth a fair trial in this disease, since no drug seemed to be known up to the present time which could be relied upon. As ergot possesses the power to contract the arterioles of the vascular system, and according to one of the accepted theories, we have dilatation of such, I gave it in fʒss doses three times per diem, and continued it for some time. I found by its use that the specific gravity was reduced within one week to 1.040, its quantity from 10 to 12 qts. to 6 to 8 qts, the thirst diminished, and the itching abated. Thus the improvement gradually and steadily took place until the urine was diminished to 1 to 2 qts. per diem; no thirst, no itching, very little sugar, and patient feels almost like a new being.

In the continued use of ergot for over a period of two months, I found very few manifestations of ergotism. I treated her solely with the ergot, with the exception of some intercurrent remedies to correct existing symptoms. Of course, I am well aware that restriction in diet must be complementary to the use of drugs. Most authors

agree that the best success is attained not by an exclusive diet, either of animal or vegetable food, but a proper restriction of vegetables becomes necessary to prevent glycogen from being continually formed. Vegetables that contain sugar or starch must be prohibited. Meats, fish and poultry should be largely given. Eggs, cream, milk, and some butter. Vegetables, especially such as should be freely partaken of, are greens, spinach, cresses, lettuce and cabbage. No wheat bread, but bran cakes and bread.

I am quite conscious that a single case is no criterion to go by; yet I think the apparent success obtained in this case should be followed by the medical fraternity, and its results frankly recorded, and perhaps the future will show that it may be efficacious.

Remarks and Discussion of Dr. Schiedt's Paper.—Dr. J. B. Walker, referring to the beneficial results obtained in some instances, by the administration of ergot, related the following:

Case 1.—Male, inmate of Blockley Hospital; presented all the ordinary symptoms of diabetes mellitus. Diuresis amounted to 26 pints per diem. Patient was enabled to surreptitiously procure preserves and sweets, and regulation of diet was impossible, yet, notwithstanding this, he improved greatly under the use of opium and ergot, which were administered combined, separately and alone. The ergot was manifestly superior to the opium, and the results such that the patient left the institution considering himself so well as to need no further medical attention.

Case 2.—Female. Two years ago, while sojourning in the country, she received unpleasant news which, in addition to the great anxiety, occasioned marked mental depression. Almost immediately diuresis occurred, amounting to from ten to twelve pints in the twenty-four hours. The tests for glucose responded characteristically. Her skin, instead of the usual harsh, dry character, presented a moist and pliant surface. The bowels were not confined, but moved daily. The treatment consisted in restricted diet and the administration of ext. ergotæ fld., ʒss t. d. Marked improvement followed, and the patient passed from under observation almost entirely well.

Case 3 is one of which I have some knowledge, although it was under the care of Prof. Clara Marshall. The detailed history I cannot give, except that all the symptoms of diabetes mellitus were present. The patient was restricted in diet, and the treatment consisted of the exclusive use of opium. The result was everything to be desired, as a complete cure resulted. . . . .

There is no specific remedy for the direful malady, and the treatment must be regulated and depend upon the peculiar determining conditions found in individual instances, as is evinced by the citations just made.

Case 2 probably depended upon dilatation of the cerebral vessels, and, therefore, was ergot especially indicated. Opium probably acts by virtue of its power to exert a sedative influence upon the cerebral centre, and is indicated in cases of nervous excitement, which determines a hyperæmia of the centres.

Dr. J. T. Eskridge exhibited a section from the pons of a patient who died from diabetes mellitus, and another from the pons of a patient who died from general paralysis of the insane. The only noticeable feature consisted in a slight change of form of a few of the nerve cells in each specimen, which probably were the result of the necessary manipulative processes consequent upon preparation. Nothing pathognomonic was discernible.

He also directed attention to latent diabetes mellitus, and narrated an instance of a sudden death, where examination of the urine revealed the existence of glucose in abundant quantity. In reference to the efficacy of ergot, he referred to a case of a girl, ten years old, in whom diabetes insipidus existed. The quantity of urine daily voided varied from ten to fifteen pints. Ergot, in the form of the fluid extract, was administered, and the results so marked that the patient was considered sufficiently improved to abandon further medical advice. In an instance of this disease, far advanced, where vision was so impaired that the patient was only enabled to distinguish day from night, ergot proved absolutely useless. The Doctor is of the opinion that in the early stages of the disease much may be expected from ergot.

Dr. L. Brewer Hall does not feel disposed to admit that diabetic cataract is the direct result of the action of glucose upon the lens, and inclines to the belief that it results from the general adynamia resulting from the disease. He referred to the experiment of producing cataract artificially by injecting solutions of sugar into the anterior chamber, in healthy individuals, but especially directed attention to the difference of true cataract occurring in diabetes mellitus, and the mere cloudiness following the injection of sugar solutions. He also spoke of the excess of fat in the blood, lipæmia, existing in this affection, and mentioned the case reported by Dr. Heyl, of

appearances of the eye ground. The fatty emboli clogging the pulmonary vessels and the fatality resulting therefrom he especially dwelt upon, and desired to impress the Society with the fact that many of the concomitant phenomena too frequently attributed to the direct effects of glucose are often due to fatty emboli which plug the capillaries and impair function. In a case of impaired vision coexisting with diabetes mellitus benefit was derived from the use of full doses of potassium bromide.

Mrs. Dr. Higgens, from the Pacific coast, a visitor, on being invited to participate in the remarks, related instances of several cases occurring in her hospital experience some twenty years ago, when restriction in diet was not enjoined. The cases all terminated fatally, or at least, no cures were noted. A relative, who lost three children in a short time, grieved greatly, and was, in consequence, afflicted with diabetes mellitus. Under the use of valerian and ergot she improved, and finally was cured. Any new trouble, however, was accompanied by a return of symptoms, which always entirely disappeared by the above treatment.

Dr. Wittig, referring to the pathology, believes the kidneys to be the principal seat of trouble. Iron, he considered to be especially needful, when renal hyperæmia constitutes an element of the disease, by virtue of its astringent properties, and inclines to the belief that it acts in a parallel manner with ergot.

When general asthenia has developed, he considered it of great importance to institute general analeptic treatment, and recommends the use of remedies like strychnine, valerian and cinnamon, which are to be alternated with iron. The mineral acids, especially nitric and sulphuric, are of value in certain conditions of this disease. The general condition of the patient apart from the direct disease should not escape our most careful attention, not only by reason of his or her comfort, but for the beneficial effects which such measures exert upon the diabetes.

ACUTE MILIARY TUBERCULOSIS.

BY CHARLES R. CRANDALL, M.D.,
Of Portland, Maine.

A. M., aged 43 years, and a mechanic by trade, was tall, of dark complexion, and well built. Had always enjoyed good health up to the commencement of the illness now to be described. His family history was good, both parents and several brothers and sisters now living.

For three weeks previous to coming under observation he had suffered from frequent irregular chills and sweats, which, according to description, simulated those of malarial origin. These recurred more or less each day, but were without the phenomena of periodicity. There was also more or less fever during this period of the disease, but not sufficient to cause the patient much alarm. Associated with these more marked symptoms, were also some cough and a noticeable decline of strength, which finally made it necessary for him to give up work, and seek medical treatment. There was also impairment of appetite, but otherwise digestion was apparently good, and the bowels acted with natural regularity.

When first seen, three weeks from the commencement of the disease, and two weeks previous to death, the appearance of the patient was well calculated to attract attention. The facial expression was that of one having been on a debauch. The countenance was haggard, the eyes unsteady and wild in their expression, while the forehead was wrinkled and bore evidences of some recent superficial abrasions. The signs of debility were most striking, as shown by the haggard countenance, by general tremor of the hands, arms, legs, and muscles of the face. Another no less noticeable objective symptom was the peculiar dusky, livid hue of the skin upon the face and neck, and which was also found to be quite general over the entire surface of the body. In shade the hue was much like that peculiar to typhus fever, or to that sometimes seen in cases of typhoid pneumonia.

At times this peculiar lividity would become intensified and take the form of "come-and-go-flushes," and these in turn would fade out into ashen or cadaverous shades.

At this time the pulse was 110, temperature 102, and breathing was somewhat accelerated. Harsh or exaggerated inspiration was general throughout the chest, and expiration was prolonged. Normal resonance all over the chest, with the exception of a slight elevation of pitch at the right apex. Aside from over action, the heart was not affected. The urine was also found to be normal. The abdomen was normal in tension and there was no tenderness or gurgling in the right illiac fossa. The bowels moved once daily and the fæces appeared natural.

The patient was ordered to remain in bed and systematic observations and treatment were carried out. The above-described symptoms intensified rapidly, and there followed a marked decline of vitality, although the treatment was of a most sustaining character.

One week from the time the above symptoms were noticed, the dusky hue was increased, if anything. The pulse varied between 110 and 150, with extremely low tension. Respiration had increased to 56 per minute. The temperature was continuously elevated, ranging from 102 to 104½. Spells of profuse sweating occurred at irregular intervals during both day and night. Upon inspection could be seen the rapid and labored breathing, the generally good distention of the entire chest, but now it was evident that the right side was not quite so expansile as the left. Percussion resonance nearly normal all over the chest, excepting a slight increase of the elevated pitch at the right apex. Auscultation, at this time, detected an increase of the harsh inspiration; prolonged expiration, especially at right apex; good expansion of the air vesicles; no bronchial breathing, either anteriorly or posteriorly.

Towards the end of the second week under observation, or the fifth week of the disease, the general symptoms continued about as mentioned above; the most noticeable being the livid hue, the weak, rapid pulse, the high temperature, the rapid breathing, *subsultus tendinum* and the presence of fine mucous râles throughout the chest. Finally, exhaustion became complete, the temperature declined for several hours until it reached about normal, and death ensued, occurring at the end of the fifth week of the disease. Cough and expectoration were slight during the entire course of the disease. There was no delirium and the only brain symptom of note was a seeming dullness of mind or general indifference.

Post-mortem.—The body retained the dusky or livid hue. The venous system was everywhere engorged. The lungs were of a deep purplish shade; their surfaces were studded everywhere with miliary tubercle. To the touch, the lungs were dense, semi-elastic, and felt as if fine shot were imbedded throughout their structure. On section the connective tissue was found to be uniformly filled with "miliary nodules, which present that gray, translucent appearance of fresh tubercle." In places here and there in the inferior lobe of right lung tubercles had begun to soften and were in the first stages of caseous degeneration. There was an excessive deposit of tubercles at the right apex, which explained the high pitch causing percussion dullness before referred to. There were no cavities in the lungs. Deposits of tubercle were also found in the liver, kidneys, spleen, and intestines. The right heart was filled with black, clotted blood.

The brain was not examined.

Acute miliary tuberculosis has been defined by Bartholow to be a febrile affection due to deposit generally throughout the body of the gray tubercle granules. It is a disease remarkable for its obscurity, for its rapid progress, and also for its fatality. Moreover, it is a disease well calculated to deceive, not only on account of its rarity, but also for its tendency at the outset to simulate other diseases. In some cases the repeated chills, high temperature and night sweats are highly suggestive of malarial infection. Other cases simulate typhoid fever so completely that Trousseau speaks of a typhoid form of galloping phthisis. It is in this form that the dull expression of countenance, low delirium or headache, *subsultus tendinum* and morning and evening oscillation of temperature are well marked. Again, acute miliary tuberculosis may be confounded with typhus, as in both there is fever, debility, rapid pulse and dusky hue of the skin.

But, after all, such confusions may generally be cleared up by a careful investigation of the history of the case and an intelligent differential diagnosis. Perhaps no other disease so well illustrates the value of diagnosis by exclusion, or what Niemeyer terms "negative information," as does this rare form of tuberculosis.

The disease is remarkable in another sense, owing to the fact that it often lights up and runs its rapid course without any assignable cause. Indeed, the etiology of the disease is not well understood.

Buhl, for instance, assigns the origin to the absorption of caseous matter from antecedent lesions, as ulcers, abscesses, or serous inflammations in other organs. Bartholow adopts the view "that the gray granulation is deposited throughout the body under the influence of certain kinds of irritation; it is necessary that a peculiar vulnerability of the constitution exist; in other words, that it be of the scrofulous type."

On the other hand, Niemeyer declared, owing to cases occurring without any trace of antecedent lesion, that acute miliary tuberculosis is a secondary disease arising in some manner as yet unknown to us, from the pernicious effect of the cheesy deposit; but that may proceed from other causes of whose nature we are equally ignorant.

Concerning the case under consideration there were no evidences of antecedent lesion, primary disease, scrofulous diathesis, or hereditary tendency.

The symptoms of acute miliary tuberculosis are well worthy of further remark. In cases occurring independent of primary disease, the most important early symptoms are rapid decline

of strength, more or less chills, rapid breathing, dyspnœa and fever. The chills come on rather abruptly and are more or less persistent. They may be suggestive of malarial chills, but, if anything, they are more like rigors, being without periodicity. There is also more or less continuous fever with remissions, hence the temperature may range from 100 to 104½. The temperature is of especial value in diagnosis, for it is calculated to excite the closest scrutiny, and should suggest the presence of a grave constitutional disease. The temperature is not at all influenced by remedies, but continues moderately high and changeable until the last week of the disease, when it gradually declines, falling to about normal just before death. Early in the course of the disease sweats are generally a noticeable symptom; they usually occur during the remission of the fever. They are of en very profuse and persist with varying frequency during the entire disease. To some, the sweating and the condition of the skin are remindful of the death agony (Bruen). Respiration becomes accelerated in the early stages, and is one of the most marked and characteristic symptoms. The frequency ranges from 30 to 60 per minute, and, as a rule, is thus maintained until death.

Cough is also a usual attractive symptom, which is due, probably, to irritation of nerve filaments by tubercular deposit. Later on cough may result from the effort to expectorate catarrhal mucus, the presence of which is due to hyperæmia of the bronchial tubes. Cough, however, is a variable symptom, said to be marked in some cases and nearly absent in others.

An extremely rapid pulse is also one of the marked features, and one which is sustained from first to last. The frequency varies from 110 to 150, and is often out of proportion to the temperature. The pulse is small, weak, often becoming thready, and is strikingly suggestive of the great exhaustion that is going on. By some authorities this persistently rapid pulse is given great diagnostic prominence, and is esteemed a fundamental symptom of this malady (Bruen).

In this form of tuberculosis there are generally well marked nervous symptoms, but they are not characteristic. If present, they are much like those of typhoid fever, and hence, there may be stupor, headache, possibly low delirium and *subsultus tendinum*. In the cases now under review, the nervous symptoms were prominent, as shown by fibrillary movements all over the body, and general unsteadiness and tremor of the limbs.

The dusky hue or lividity of the skin, before alluded to, is another important and common symptom. It may appear quite early, but generally is most marked in the latter stages of the disease, when circulation has become very feeble and the excessive deposits of tubercles have impinged upon the arterioles, preventing due aeration of the blood.

Singularly enough, physical examination is often unsatisfactory in the highest degree, save as a method of obtaining "negative information." Indeed, it is positively confusing to come across a patient having dyspnœa, rapid breathing, probably cough and expectoration, a cyanosed skin, and then not be able to find any physical signs of pulmonary disease. Yet such may be the case in the earlier stages of acute miliary tuberculosis. As a rule, inspection will not discover any change in the contour of the chest. Auscultation may, in all probability, discover harsh inspiration, feeble expansion and prolonged expiration. The presence of fine mucous râles in the bronchi may also possibly be detected. In some cases, however, none of these signs will be discovered by auscultation. Toward the end of the disease the râles referred to are generally present in considerable numbers. Percussion, as a general thing, is as unsatisfactory as inspection and auscultation. If the percussion note is changed at all, it is when the disease is well advanced, and is manifested by a slight elevation of pitch at the apex of one or both lungs. The question may well be discussed, since there is such an abundant deposit of tubercles, why is there not more dullness on percussion? It is because the tubercles are very generally distributed "in the sheaths of the arterioles, the sheaths of the bronchial filaments, and in the lymphatic vessels." Therefore, the alveoli and bronchi maintain, to a large degree, their distended and expansile condition. Hence, resonance is afforded on percussion. On the other hand, in chronic tuberculosis the tubercular deposit is generally localized, and is followed in time by inflammatory changes, caseous degeneration and extensive infiltration, all of which causes solidification of the parenchyma. Hence, it is common to find circumscribed areas of dullness in chronic tuberculosis.

In regard to physical examination in acute miliary tuberculosis, Niemeyer declared that the most persistent examination of the chest reveals nowhere that the substance of the lung is infiltrated. And upon the same subject, Ruehle said that in particular, there is seldom noticed any abnormity in the percussion note; at most, only some impairment of the tone at various parts of

the chest, as compared with the corresponding situation on the other side, or a slight tympanitic quality, changes which are not constant, but alternate on repeated examinations. Moreover, the same author goes on to say that there is no single symptom nor group of symptoms sufficiently distinctive to make the existence of acute miliary tuberculosis a necessary inference during life. The certainty of the diagnosis can only be approximative.

The latter statement, however, will not apply in every instance. The disease presents an ensemble of symptoms which, by one who has studied and carefully watched one or more cases, will hardly be mistaken. The writer remembers with pleasure, how rapidly and certainly his distinguished teacher of physical diagnosis, Dr. Bruen, of the University of Pennsylvania, diagnosed the case in hand. The diagnosis was in no sense approximative, but was positive, and from the first was verified at the post-mortem.

During the earlier stages of acute tuberculosis the diseases most likely to be suggested to the mind by the appearance of the patient are intermittent fever, catharrhal pneumonia and typhoid fever. It is believed, however, that an observation of the following differential points will tend to aid in establishing a correct diagnosis :—

Acute Miliary Tuberculosis.	*Intermittent Fever.*
1. Chills occur at irregular periods.	1. Chills occur periodically.
2. Fever remittent in character, and not influenced by treatment.	2. Fever intermits and yields to treatment.
3. Pulse rapid and weak, with tendency to increase.	3. Pulse rapid and full during fever, and then subsides.
4. Temperature constantly elevated, with variations between 100 and 103.	4. Temperature characterized by extreme changes.
5. Marked disturbances of respiration.	5. No disturbance of respiration, as a rule.
Acute Miliary Tuberculosis.	*Pneumonitis.*
1. Onset gradual.	1. Onset rapid.
2 Chills frequent and more or less persistent.	2. Usually one severe chill followed by more or less chilly sensations.
3. Temperature runs up gradually, never extremely high, subject to remissions.	3. Temperature rises very rapidly to about 104, continues high for a few days and then begins to decline.
4. Irregular sweats are a common symptom.	4 Sweating is more or less frequent, and continuous in some cases.
5. Pulse rapid and weak from the first.	5. Pulse rapid but full and strong during first stages
6. Cyanosis and lividity a prominent symptom, but most marked during the later stages.	6. Cyanosis or flushing a common symptom early in the disease.
7. Rapid breathing a marked symptom.	7. Rapid and shallow breathing a marked symptom.
8. No soreness or pain in the lung.	8. Usually more or less pain.
9. As a rule, no dullness on percussion.	9. Dullness sooner or later over a portion of one or both lungs.
10. Crepitant or coarse bronchial râles may or may not be present at first, but frequently appear during the later stages of the disease.	10. Crepitant and sub crepitant râles; mucous and submucous râles in the larger tubes, appearing within the first 24 or 48 hours.
11. More or less cough and expectoration generally present.	11. Cough a marked symptom. Expectoration becomes abundant, sputa often discolored.
Acute Miliary Tuberculosis.	*Typhoid Fever.*
1. Onset gradual.	1. Onset gradual.
2. Frequent chills.	2. Usually a chill followed by chilly sensations.
3. Possibly more or less headache.	3. Headache generally complained of.
4. Mental disturbance and delirium not the rule, but may occur.	4. Mental disturbance and delirium a common symptom.
5. No epistaxis.	5. Epistaxis a common symptom.
6. Tongue usually dry and coated.	6. Tongue dry and coated.
7. Bowels may or may not be normal.	7. Bowels generally loose. Exceptionally, constipation may exist.
8. No abdominal tenderness or tympany.	8. Abdominal tenderness and tympany.
9. Temperature rises gradually, and there may be evening exacerbations and morning declines.	9. Temperature rises gradually, and generally has a regular evening exacerbation and morning decline.
10. Râles are generally present sooner or later.	10. Râles are frequently present, sooner or later.
11. Breathing soon becomes rapid and so continues.	11. Breathing but slightly if any changed, unless complication supervenes.
12. Pulse rapid and weak.	12. Pulse rapid and weak.
13. Generally either marked cyanosis or lividity is a common symptom.	13. Cyanosis not often present.
14. More or less profuse sweats a common symptom.	14. More or less sweating in about half the cases; in the other half the skin is hot and dry.
15. No eruption.	15. Eruption may appear after seventh day.
16. Subsultus tendinum may exist.	16. Subsultus tendinum may exist.

Of course, the above distinctions are merely approximative, and therefore will be more markedly defined in some cases than they will be in others. As is generally admitted, one of the peculiarities of the disease in question is its similarity to several others, and hence there is a wide range of variability in symptoms. Indeed, Bartholow, in summarizing the great similarity between some cases of acute miliary tuberculosis and typhoid fever, says as follows: "The cases, as a rule, present a striking analogy to typhoid, not only in the symptoms as described but in the physiognomy of the patient, the decubitus, the utter prostration, and in the course of the disease."

The basis of the diagnosis of acute miliary tuberculosis must rest on the marked evidences of some serious intra-thoracic disease, as shown by the rapid breathing, the cough and expectoration, and the general bad condition of the patient. On the other hand, the diseases to which it presents a striking analogy must be excluded by "negative information."

The prognosis of the disease is death. The duration, on an average, is about five weeks. The

patient perishes from the destructive fever process and the tubercular obstruction which prevents the due oxygenation of the blood. Perhaps no better idea of the rapidity of the disease and the appearance of the patient could be obtained than is conveyed by a recorded description of a case by that matchless clinician, Trousseau.

"On the 2d of February 1861, my colleague, Dr. Barth, and I were sent for to Les Ooiséaux Convent, to see a young Spanish lady, sixteen years of age. Her ordinary medical attendant, Dr. Vosseur, informed us that this young lady had, a fortnight previously, begun to have uncomfortable feelings and to suffer from fever, without experiencing any local symptoms, excepting decided oppression in breathing. As the symptoms continued, Dr. Barth was sent for, eight days later; at that visit he was struck with the lividity of the lips and face; the lividity extended to both hands. There was great oppression of breathing and ardent fever. Nothing abnormal could be detected by the most careful auscultation; there was neither râle nor the sound of prolonged expiration. The functions of the stomach were as well performed as it were possible to desire. Eight days after that visit of Dr. Barth, I again met him in consultation on the case. There was then extreme frequency of pulse and respiration and a frightful increase in the lividity of the skin. During the night the patient had had insomnia and some raving. Throughout the whole extent of the left lung we heard very fine subcrepitant râles, mingled with mucous râles; there was no expectoration. She died on the 4h of February, seventeen or eighteen days from the beginning of the attack."

Authorities referred to: Niemeyer's Practical Medicine; Flint, Practice of Medicine; Trousseau's Clinical Medicine; Bartholow's Practice of Medicine; Ziemssen's Cyclopædia of Medicine; Bruen, *Medical Record*, January 22d, 1881.

Editorial Department.

Periscope.

Bald Tinea Tonsurans.

Dr. Liveing writes to the *British Medical Journal* as follows:—

On several occasions I have called attention to the occurrence of smooth, bald patches in tinea tonsurans, exactly resembling alopecia areata. I have also mentioned the fact that when, in these cases, one patch becomes quite bald, the others quickly follow suit. A remarkable example of this has lately come under my observation. Two brothers have been under my care for some time past, with ordinary well marked tinea tonsurans, with abundance of the trichophyton. Their parents objected to vigorous treatment, and therefore mild remedies only have been used, which have not at any time produced the slightest soreness. The elder boy had six or seven separate spots of tinea tonsurans, and, during the last fortnight, every one of these spots, great and small, have become perfectly bald, smooth, and shining, with a well defined margin of healthy hair. What I wish especially to call attention to is (1) the suddenness of the change, (2) that the bald spots are strictly confined to patches previously affected with tinea tonsurans, not a trace of baldness existing on any other part of the head. In this instance there is not a stump nor a hair to be found, though, when I previously saw him, the patches were thickly covered with stumps and hairs. In other cases of this kind that I have met with, it has been generally possible to find one or two stumps left, either on or at the margin of the patch, by the microscopic examination of which the nature of the case could be determined. When the baldness is as perfect as it is in this instance, we may probably regard it as a spontaneous cure. In the younger boy the tinea tonsurans has run an ordinary course. It is somewhat difficult to say whether we should regard a case of this kind as one of true alopecia areata following on tinea tonsurans, or as a peculiar and exceptional feature in tinea tonsurans itself. Nor do I think the question of much importance, provided we remember that infection is not always removed; or, in other words, that the denudation is not in every case so complete as to remove all the stumps affected with the *Trichophyton tonsurans*. A want of knowledge of this fact has, in past times, led to two mistakes; the one, that alopecia areata is a *parasitic* disease; and the other, that it is *occasionally contagious*.

It has been pointed out by several observers that in almost all chronic scaly affections of the skin one can, by a diligent examination of the scales under the microscope, find the spores of a vegetable parasite, commonly called *Torula vulgaris*. I can confirm this from my own observations. This parasite is quite harmless, and is rather a consequence than a cause of the disease.

Red Sweat.

The *Lancet* says: It has long been suspected that the red as well as the blue color occasionally observed in perspiration is due to the presence of bacteria. In a woman whose sweat, especially in the axillæ, had a red tinge, Hofmnan, in

1873, found that uniform red masses adhered to the hairs, but he did not ascertain their nature. Pick observed in a peculiar case of skin disease reddish masses of bacteria on the hairs. Eberth noticed bacteria in yellow sweat. Additional observations of the same kind have been reported by Babesiu, of Pesth. A woman twenty six years of age presented pale red sweat in the right axilla, where the skin and hair were also slightly reddened. From time to time the perspiration became blood-red in color, associated with hysterical and nervous disturbances. A sister who slept with her also became affected in similar manner, the perspiration in the right axilla becoming red. A third case presented itself in a young healthy man, who complained of occasional blood-red sweat; and a fourth in a young woman. In all the symptom was associated with troublesome itching. Microscopical investigation yielded in all the cases a similar result. The hairs of the axilla were thin, pale-red, brittle, and surrounded with a colloid-looking, rusty or bright red sheath, in places of considerable thickness, and having a rough surface. It consisted of red masses presenting a radiating striation, more or less confluent, apparently proceeding from fibres of the cortex of the hair or from some broken part of its surface. The radiating striation was found to be due to the aggregation of round or ovoid bacteria, scarcely a micro-millimeter in diameter, which were united in zooglœa masses by a reddish intermediate substance. Nodular swellings on he hair were produced by an infiltration of the organism between the separated fibrils. The roots of the hair were free from bacteria. The red tint of the sweat was found to depend upon numerous roundish masses of zooglœa, resembling those of Bacterium prodigiosum. The bacteria were deeply colored by anilin and hæmatoxylin, and were rendered more distinct on the addition of acetic acid or liquor potassii, while the zooglœa shrank under the influence of alcohol, ether, and turpentine. Sulphuric acid changed the red color to violet, and then to violet-blue. In sterilized culture solutions the bacteria multiplied slowly. The conclusions drawn from these observations are that the red sweat often found in the axilla is colored by a sphero-bacterium, the development of which gives rise to an excessive perspiration, and sometimes to brittleness of the hair, itching, and slight tinting of the skin. The red sweat appears to be contagious. The bacteria resemble, on the one hand, the colorless zooglœa found in hair, and, on the other, certain chromogenous bacteria, especially B. prodigiosum, from which it is distinguished by the brick-red color of the intermediate substance. It is more difficult to cultivate than B. prodigiosum, but gives essentially the same chemical reactions.

—M. Schlagdenhauffen, of Nancy, has studied the seed of an African plant known by the name of la pola. Its cotyledons contain caffeine and tannin. The Arabs use it to improve impure water. M. Schlagdenhauffen, in a note from him read at a meeting of the Académie des Sciences, stated that he considers la pola may rank in utility with tea and coffee.

Reviews and Book Notices

NOTES ON CURRENT MEDICAL LITERATURE.

——Address in Hygiene. By Benjamin Lee, M.D., PH.D., Philadelphia. Extracted from the Transactions of the Medical Society of the State of Pennsylvania for 1881.

——Review of the Drug Trade of New York for the year 1881. Prepared by D. C. Robbins Esq., for the twenty-fourth annual report of the Chamber of Commerce of New York State.

——An analysis of seven hundred and fifteen consecutive cases of skin disease, by H. W. Stelwagon, M.D., comes to us in the form of a reprint. This is a very interesting article for dermatologists.

——A case of Basedow's Disease, terminating in total loss of sight from (neuro-paralytic) inflammation of the cornea, by Henry G. Cornwell, M.D., of Columbus, Ohio, comes to us as a reprint from the *American Journal of the Medical Sciences*, October, 1880.

——Intermittent Spinal Paralysis, of Malarial Origin. By V. P. Gibney, A.M., M D. Reprinted from the *American Journal of Neurology and Psychiatry*. The author concludes "that there may be spinal paralysis affecting one side or a single member, clearly traceable to malarial poisoning. They are not numerous, however. If nervous diseases are increasing, as many authorities claim, may we not expect to find the cerebro-spinal axis the more readily and the more frequently influenced by malarial poisoning, just as we find now the nerves so commonly affected?"

BOOK NOTICES.

Lectures on Diseases of Children. A Handbook for Physicians and Students. By Dr. Edward Henoch, Director of the Clinic and Polyclinic for Diseases of Children, in the Royal Charité, and Professor in the University of Berlin. pp. 357. New York: William Wood & Company, 1882.

This volume constitutes the March number of the well known "Wood's Library of Standard Medical Authors." This treatise is based upon a most extensive experience of thirty-seven years. Throughout the work the author makes frequent reference to a list of prescriptions at the end. This is done principally to aid young physicians just commencing to practice among children. Unfortunately these prescriptions are written in the metric system, which is comparatively unfamiliar to the mass of the profession in this country. It is otherwise a good book, and to be highly recommended.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

SUBPŒNAS TO MEDICAL MEN.

This is a subject for the consideration both of the jurist and the physician. A subpœna to any one must always be obeyed, and its disregard, considered contempt of court, is usually severely punished. In the majority of cases this is eminently just and commendable. The merchant, the lawyer, the gentleman of fashion and the *loafer* can obey a subpœna without any detriment to his own welfare or to that of any one else. The case, however, is oftentimes far different with the physician. Suppose he has been subpœnaed to appear in court on a certain day at ten o'clock. He may be called at seven or eight o'clock of the same day to a case of labor, and when half-past nine o'clock comes his patient may be suffering from post-partum hemorrhage, when to leave her would be to insure her death. Of course, we doubt not that, in such an extreme case, the court would deal leniently with the delinquent, but such would depend very much on the character of the particular judge, and since these men are only human, we can readily conceive that even under such pressing circumstances and with such ample excuse, there would be found judges ready to inflict the severest penalty on the physician. Such ought not to be the case, for two reasons.

1st. It would be unjust to punish a man for neglecting a lesser to perform a greater duty.

2d. It is a temptation for some men to neglect a duty, for the neglect of which they *may* not be held responsible, to fulfill one, for the neglect of which the punishment stares them in the face.

It would be well to have this matter clearly understood. Physicians are, by law, on account of the pressing necessities of their professional duties, exempted from jury duty; so ought they likewise to be exempted from subpœnas, when it can be shown that attendance in court as a witness will redound to their own and their patients' disadvantage. Witnesses are often compelled to remain idly in court for hours. Physicians in active practice cannot afford to waste this time. Of course, there are certain criminal cases in which the evidence of the physician is absolutely essential, but in such trials his convenience ought to be consulted, and he ought to be most liberally rewarded. In civil suits he ought not to be forced to neglect his patients. These few words are intended to direct thought and to turn legislative energy in this direction.

INSANITY FROM DRUGS.

We take pleasure in calling attention to a circular from Dr. H. H. Kane, which appears in another column. His object is a most worthy one. No doubt many cases of insanity are directly traceable to the abuse of strong and powerful drugs, and it will be of great interest to the profession to have reliable statistics on this subject. We would, therefore, earnestly commend this circular to all physicians, and strongly urge them to answer the questions contained therein to the best of their ability. By so doing they will advance science; and to advance medical science ought and *must* be not only the duty, but the pleasure of every true physician. Therefore, we would urge all our readers to be prompt in answering this circular.

News and Miscellany.

Medical Society of the State of Pennsylvania.

THIRTY-THIRD ANNUAL SESSION.

Pursuant to adjournment, the Society met in Battery Armory, Titusville, Pa., May 10th, at 10 A.M., and was called to order by the President, Dr. Jacob L. Ziegler.

Prayer was offered by the Rev. Dr. Henry Purdon, after which the list of delegates was read by Dr. Wm. B. Atkinson. Dr. Geo. O. Moody, of Titusville, then delivered the

Address of Welcome.

Mr. President and Gentlemen of the Pennsylvania State Medical Society:—

It will ever be a pleasant reminiscence that the honor of greeting you on this your first meeting in Crawford County has been assigned to me. As the representative of the Crawford County Medical Society, I am to welcome you as an organized body of workers in the broad field of theoretical and practical medicine. As the representative of the citizens of Titusville, Pa., I am to welcome you individually, trusting that your brief visit among us will not be entirely destitute of social enjoyment, and confident that our own anticipation of pleasure and profit will be fully realized.

We can present to you, gentlemen, for your admiration, no ancient historical records of our city, whose history has not been written—we trust not yet lived. We can point you to no enchanting natural scenery to delight the eye, no fine architectural designs nor rare gems of art, to please the æsthetical taste. Were you here only in pursuit of recreation and pleasure, these would be fatal defects. We are told that travelers in foreign lands are wont to go into ecstacy at the sight of ancient ruins. If modern ruins will answer your purpose you shall have a free show, and can feast the eye to the heart's content. But neither our modern ruins nor our want of natural scenery and institutions of public interest will deter us from giving the most profound attention to your words of wisdom, feeling, as we do, that the chief object of your meeting here is to reëxamine the past history and present condition of medicine, to place on record whatever has been proven and found valuable, and to reject whatever has failed to stand the crucial test of scientific research and practical experience. You are also to reach out into the unexplored regions of physiology, pathology, surgery, therapeutics, and all the branches, direct or collateral, of our profession, to gather in new facts and develop new theories, in their turn to be proven true or false by future investigations.

Our profession has a right to demand of all such organizations as this, that at every meeting it shall add something to its fund of scientific and practical knowledge, should help to mark the boundaries of its established truths and elevate it to the dignity of a fixed science.

But we are not medical men *only*, nor is the debt we owe due *alone* to our profession. That power from which our Society has derived its corporate privileges has a right to our allegiance and to demand from us, for the public good, a knowledge of those sanitary laws necessary to protect the public health and add to the sum of human life. So also does that Higher Law—the source of all human law—make it incumbent upon us, not only to heal the diseases and relieve the sufferings of our fellow creatures, but to warn the masses throughout the State, and especially those in whose midst the Society meets from year to year, where they are to look for and how contend against those unseen pestiferous poisons, which, like the breath of the deadly upas, silently creep into the homes and bedchambers of their unconscious victims, filling our land with the lamentations of Rachels, and entailing upon thousands a life of disease and misery. The education of the people in hygienic and sanitary laws becomes more and more imperative, as, year by year, preventive medicine advances to the front, and becomes the pioneer of the curative art. If we are not our brothers' keepers, the day is not far distant when an enlightened public opinion will demand of us, as the conservators of the public health, that we so instruct our brothers and fellow citizens as to enable them to be their own keepers and the keepers of those whom nature's law has placed under their protection. Confident, from the past history of our Society, that it will not neglect its duties to the medical profession, I sincerely trust a voice will go out from this meeting upon the importance of the proper construction, ventilation, heating, and sewerage of our homes, so strong and so clear, that it will be heard and heeded by every inhabitant of our country. Again, gentlemen, allow me to bid you a hearty welcome, and a God speed in the work before you.

The committee of arrangements then presented their report, after which followed the introduction of delegates from other Societies and of visitors not delegates.

Report of Delegates to other Societies.

Dr. Laurence Turnbull, of Philadelphia, presented a written report of his visit as a delegate to the Centennial Meeting of the Massachusetts Medical Society, at Boston, June 7th, 1881.

The meeting was one of great interest, and Dr. Turnbull alluded to the valuable historical address of Dr. Samuel A. Green, now the efficient mayor of that city. He also gave an abstract of the address of President Eliot, of Harvard University; and the able reply of Dr. Williams, the distinguished ophthalmologist, President of the Massachusetts Medical Society, in which he returned thanks for the graceful hospitality extended to them. He also stated that it was owing to the fostering care and willing coöperation of the college with the Society that the standard of education in the medical school has been kept so high. One of the most instructive features of the celebration was the exhibition of instruments, apparatus, books and medicines, dating from the fifteenth century up to the present day. But the crowning event was the centennial anniversary exercises, which included addresses and a splendid poem by the renowned Oliver Wendell Holmes.

After which the ordinary routine business as per programme was transacted. (See REPORTER, April 15th.)

MAY 10th, 2. P. M.

After the transaction of the routine business, the address in Surgery was delivered by Dr. H. L. Orth, of Harrisburg. A paper on Gheel was read by Dr. S. S. Schultz, of Danville. Following this came a paper on

The Oleates and Oleo-Palmitates in Skin Diseases,

read by John V. Shoemaker, A.M., M.D., of Philadelphia, Physician in charge to the American Hospital for Skin Diseases, etc.

At the meeting of the Society, in 1879, Dr. Shoemaker called attention to the oleates for dermic medication, and spoke at length upon the great value that they possessed over the *ordinary* ointments then in general use.

Dr. Lawrence Wolff, of Philadelphia, has found the best and most ready method for preparing oleates by the double decomposition of sodium oleate with solutions of neutral salts, and as a general method of their manufacture, proposes the preparation of the former by a saponification of oleic acid with a solution of sodium hydrate. A solution thereof, in eight parts of water, is precipitated by the salt required; the precipitate, washed and dried, thus yields the oleate required. Of the manner of preparing each individual one, he shall speak under their respective headings.

The oleates of mercury, atropia, quinia and antimony, with their therapeutical action, were considered, and Dr. Shoemaker claimed to have first introduced the oleates of lead and bismuth, in 1879, before the Society. The author also brought forward and showed for the first time the following oleates:—

OLEATE OF ZINC.

Oleate of zinc is made by decomposing a sodium oleate, with a saturated solution of zinc sulphate, boiling out and drying the precipitate and then reducing it to an impalpable powder, which is rapidly accomplished. One part thereof melted with three parts of a fatty vehicle, yields the ointment he has been in the habit of using. He has, however, obtained the very best results with the oleate of zinc alone, and not mixed with a fatty diluent; which is a fine pearl-colored powder, with a soft-soapy feel, very much like powdered French chalk.

When dusted over a denuded surface, it will have, by the combination of the oleic acid and zinc, a stimulating as well as astringent action. It is, *par excellence*, the remedy for excessive sweating, or in cases of hyperidrosis and osmidrosis. I have used it for more than a year, dusted over the surface, in patients suffering from an increased flow of sweat about the palmar and plantar surfaces, and around the axilla and genitalia. It has relieved and permanently cured some of the most distressing cases suffering with excessive secretion about the feet, in which the epidermis had macerated and peeled away, leaving a tender and exposed skin, and giving rise to a very disagreeable odor. It is likewise most efficacious as a lady's toilet powder, particularly to those who are afflicted with shining faces in the summer, called seborrhœa oleosa. It is the most valuable and the most reliable remedy in that commonest variety of eczema known as eczema vesiculosum. He has witnessed, and also those who have been in attendance in his clinics during the past winter, marvelous results from dusting this oleate over those on whom the extremities and even the trunk had been covered with small vesicles, swollen, hot, inflamed, the parts constantly weeping, and the itching so intense that the patient would rub and scratch the surface until it had become perfectly raw; in such cases he has frequently seen the discharge dry up, the swollen and inflamed skin resume its normal condition, by the threefold action of the oleate in protecting, stimulating and astringing the parts. If this oleate be dusted on an inflamed surface that is hot and tumid, such as is found in erythema about the groins and axillæ, and in herpes, particularly of the genitals, it will cling to the skin, and will not fall or brush off like ordinary dusting powders. These advantages prove, beyond a doubt, the superiority of the oleate of zinc over the ordinary ointments and powders in the class of skin eruptions he has just named.

OLEATE OF COPPER.

Copper oleate is obtained in a similar manner, by double decomposition with a saturated solution of copper sulphate. The washed precipitate melted with either four or nine parts of cosmoline, fat, or lard, gives respectively a twenty or ten per cent. of oleate of copper ointment.

When applied to the unbroken skin, the oleate of copper ointment rapidly penetrates deeply into the parts, particularly into the follicles, and will produce slight stimulation. On the other hand, if brought into contact with broken skin which it stimulates, an insoluble albuminate is formed, which coats over the surface and supplies the place of the abraded skin.

The most successful results that he has had with the ointment of the oleate of copper has been in rapidly curing cases of ringworm. He directs it to be used in the following manner, both in ringworm of the scalp or body: The parts should be first washed with soap and water, and in case the hairs be involved, the hair should be cut short, and after drying, a small piece of the ointment of this oleate, in proportion to the size of the patch, should be lightly rubbed on the surface. The same procedure should be repeated night and morning, until all trace of the disease had disappeared; the parts should only be washed about once in ten or twelve days, as the too frequent use of water may prevent the oleate from penetrating to the lowest depths of the follicle in order to successfully destroy the fungus. It may also be necessary to pluck out the diseased hairs, or epilate, in very inveterate cases, although he has cured some without being compelled to get rid of the diseased hairs in this manner. If this method is carefully followed, the oleate just named will no doubt effect a complete cure in some of the most obstinate cases. He has also used this ointment, spread on old muslin, for indolent ulcerating surfaces; and has found it an excellent cleanser and healer. It acts by condensing the tissues, and constringing the blood vessels, and thus lessens the determination of blood to the part. It will relieve, and some of his patients have reported cures from its application to, hard and horny warts, corns and bunions.

OLEATE OF ALUMINIUM.

Aluminium oleate is also prepared by decomposing sodium oleate with aluminium sulphate; the washed precipitate mixed with equal parts of lard gives the ointment of aluminium oleate he shall speak of.

The ointment thus prepared is semi-solid, dark brown in color, and having a most powerful astringent action. It has the most decided action of all the other oleates in checking muco-purulent discharges that occur in one of the varieties of eczema. For this purpose it can be applied with advantage around the arms, groin or buttock of those who have excessive discharge from the friction of those parts—particularly in children and infants—and so check the profuse secretion or bring the parts into a suitable state for other remedies. It can also be employed with success as a dressing in foul ulcers, abscesses, sinuses, burns, and scalds, from its power to coagulate albumen, constringe the vessels, by its anti-styptic action, and check or correct the secretion of muco pus.

OLEATE OF IRON.

Iron oleate: precipitate with ferrous sulphate from sodium oleate on boiling is soon converted into ferric oleate; and as such may either be used pure, or if mixed with an equal amount of a fatty base, as his ointment of iron oleate.

When prepared in the above manner, it occurs in a reddish-brown paste, inodorous, having a styptic taste, and readily soluble in fats, which hold in combination about 30 per cent. of the oxide of iron; forming a powerful and important therapeutic remedy. It is free from local irritation when used topically, but when brought in contact with an ulcerating surface it has a very mild astringent action. It can, therefore, be used, as he has tested it, both for a constitutional and local effect. He has already had some excellent constitutional (systemic) results, having a small piece of this ointment rubbed in the axillæ and inguinal regions, two or three times a day. The effect of this ointment has been very good on some upon whom he has applied it, who had a deranged state of the digestive organs, and inability to bear the ordinary chalybeates, weak pulse, and a pale and flabby condition of the skin. He has also been using it with marked effect in some cases of scrofula. He is now testing its therapeutic action, not only in cutaneous affections but also in many other diseases, from which he expects shortly to hear favorable and satisfactory results. It will no doubt take the place of other chalybeates—particularly when the latter are not well borne by the digestive organs—and will probably constitute one of the best constitutional tonic and local astringent remedies.

OLEATE OF ARSENIC.

Arsenicum oleate must be derived by making arsenious chloride by the cautious saturation of hydrochloric acid with arsenicum metal. The solution thus obtained, precipitate from sodium oleate the oleate required, which he employs in the quantity of twenty grains to one ounce of fatty base, as his ointment of arsenicum oleate. It is in this form a soft, yellowish ointment, having no action on the skin, except when abraded or in wounds, ulcerating and granulating surfaces, in which condition it will excite active inflammation and destroy the tissues of the part to some depth. In lupus, especially the ulcerating varieties, the constant application of the ointment of arsenicum oleate will destroy cell infiltration in a mild, and in a comparatively painless manner. It may be applied with almost as good result in the tubercular form of lupus, providing the parts be thoroughly scraped, so as to bring the oleate in contact with an abraded surface, which will greatly enhance its action. It can be used very satisfactorily in the ulcerating variety of epithelioma, and will be better borne for a longer period to the parts than any other form of arsenic. He has likewise employed it after puncturing or scraping the surface to destroy warts, condylomata, nævi. corns, horns and old granulations. In some instances he has incorporated in this oleate, with a very happy effect, opium, belladonna, hyoscyamus and arnica.

OLEATE OF SILVER.

This new oleate, like the others, is prepared by precipitating the sodium oleate with a saturated solution of silver nitrate, washing the precipitate with boiling water, and drying it, after which it is reduced, like the zinc oleate, to a fine powder. One drachm of this dissolved in an ounce of fatty vehicle forms what he has employed as ointment of silver oleate. Made in this manner, it occurs as a pulverulent salt, of brownish-yellow color, which, if mixed with lard in the proportion of from ten to sixty grains of the oleate of silver to one ounce of lard, forms a dark brown, soft and pliable ointment.

This oleate in its natural form, sprinkled over old chronic ulcers, bed sores, and exuberant granulations, will set up a healthy state in the parts. The best effects he has experienced from using the ointment of this oleate, which not only coats over an abraded surface by combining with the albumen, and so protecting it from the air, but it also causes powerful contraction of the blood vessels, and thus condenses the tissues. It is a safe and efficacious remedy in erysipelas, and can be used either around the margins, to prevent the inflammation from extending, or can be applied weak, ten to twenty grains to one ounce of lard, over the inflamed surface. It has reduced the active inflammation by being constantly applied in several cases of superficial varieties of lupus. It will be serviceable applied to boils, and carbuncles, and may often arrest pustulation in its early stage. An intolerable itching that sometimes occurs in the meatus auditorius, the anus, and the genitalia, may often be quickly relieved by applying the ointment either alone or combined with opium and belladonna. The advantages that the ointment of oleate of silver possesses over the ordinary silver ointments, are its stability and prompt action, and by being less painful and milder in its curative manner, but still penetrating deeper into the affected part.

The oleates of magnesium, lithium, calcium, antimony, tin and others, are also readily made by similar processes, but are at present of little therapeutic value as far as dermic medication is concerned, and are mentioned only for the benefit they may ultimately prove for internal exhibition.

While his experiments with these new prepara-

tions cover a period of almost two years, their efficacy and application in the treatment of dermic affections he does not claim yet as having exhausted; and while daily he finds new and valuable use for them, he will not speak of them further at this time, when they are still in their experimental stage, and would court the trial of them by other practitioners, and communications from them as to their results.

He has thus, in a brief and practical manner, endeavored to describe for the first time the therapeutic action of chemically true oleates; although he brought forward some of the same preparations before the Society in 1879.

A few years prior to that period, Mr. John Marshall, of England, published a paper on the treatment of persistent inflammations by the local applications of solutions of oxide of mercury and morphia in oleic acid. It will be observed, however, that these preparations, too, were only solutions, and not the true oleated compounds that he has just considered. While, therefore, the credit is due to Mr. Marshall for suggesting the oleic solutions referred to, Dr. Shoemaker claims to have first used the true chemical oleates, and to have used and published an account of the oleates of lead and bismuth (*See Transactions of State Medical Society of Penn'a. for* 1879), long before a description of these oleates were published and claimed by some of the foreign journals for Drs. Crocker and McCall Anderson.

The oleates in the form in which he has shown enjoy the widest range of therapeutic application. The superior advantages which they possess over the ordinary ointments, he considered under the following five heads:—

First. Their deep penetration. Second. Their freedom from rancidity. Thirdly. Their cleanliness of application. Fourthly. Their great economy, and Fifthly. Their antiseptic action.

Firstly. Their deep penetration. The oleic acid in their combination gives them active solvent powers and facility and ability to penetrate rapidly into the animal tissue, while rendering any chemical ingredient with which it is combined more active and effective in dermic medication.

Secondly. Their freedom from rancidity. The same acid held in the combination will always keep the fat—with which the oleate is mixed—pure, sweet, and free from rancidity.

Thirdly. Their cleanliness of application. The rapid absorption of the oleate into the tissue will prevent any unpleasant disfigurement of the parts, will not stain the linen, and will give comfort and ease in their application.

Fourthly. Their great economy. The oleate should not be rubbed in vigorously, like the ordinary mechanical ointments, which require considerable friction; they only require to be lightly smeared or applied over the surface in very small quantities, hence their great economy.

Fifthly. Their antiseptic action. The oleic acid in combination has also a most happy and effective action in rendering the oleates antiseptic or deodorant upon all discharges and suppurating surfaces.

A great drawback, however, to the general adoption of the oleates, will be the lack of knowledge that the majority of pharmaceutical chemists have, at the present time, of their manufacture. Thus the Doctor will often prescribe a certain oleate, and be surprised to see no change in his patient, but after careful investigation, which he has made in several instances by having the patient bring him the oleate, he has found either a substitute or an oleic solution in place of the remedy ordered. Again, it has been his misfortune to have some pharmaceutical chemists decry the action of the oleate to his patient, and from these persons he has learned that they knew nothing whatever about their manufacture. An ordinary mechanical ointment, full of lumps, was easier mixed, in the old stereotyped manner, or a spatula full of a petroleum product incorporated with some metal, was their ideal of a proper kind of a salve that should be used and would be efficacious. You will, nevertheless, find good, honest and straightforward chemists, who, if they do not understand the manufacture of the oleates will procure them for you; or will go to work and make them; but always examine their products and see that they possess all the physical properties which he showed in the excellent specimens of true and staple oleates.

This was followed by a paper on "Medicine, and Something More," by Dr. Traill Green, of Easton.

Dr. E. E. Montgomery, of Philadelphia, then read a paper on

Procidentia

and its relief, in which, after reviewing the opinion of authorities upon the true uterine support, he assumed that the vagina was the support in the normal condition, and the ligaments nature's reserve forces.

Prolapse occurs as a result of three conditions: 1st, pressure from above; 2d, increased weight of uterus; and 3d, want of support below. The most potent agents in its production are, engorgement of the uterus, frequent labor, laborious exercise, early resumption of domestic duties, neglect of laceration of perineum, and the frequent use of a widely expanding bivalve speculum.

There are three stages: 1st, simple descent; 2d, incomplete prolapse; and 3d, complete prolapse or procidentia.

The earlier symptoms are, pain in back and limbs; bearing down, burning pain in pelvis and groins, and sensation of pressure upon fundament, followed later by vesical and rectal distress and tumor at the vulva.

Procidentia is distressing, from friction against clothing and limbs, and from being bathed with urine, often producing ulceration. The indications for treatment are, first, to replace the uterus, and second, to prevent the recurrence of the disorder. The latter comprises mechanical and surgical measures. The mechanical support is by means of pessaries, which are unpleasant, ineffective, and not without danger. In reviewing the various surgical measures proposed, he claims that they all, with the exception of LeFort's, fail to give permanent relief, for two reasons: 1st, they do not elevate the uterus to its normal position and thus facilitate the absorption of hypertrophy and the atrophy which should occur with age; 2d, they do not afford sufficient support in the upper third of the vagina, allow the enlarged organ to sink like a wedge into the nar-

rowed canal, and by pressure cause the absorption of the tissue below, until it is again outside. These causes of failure are obviated by LeFort's operation, which, by constructing a bridge of tissue in the centre of the vagina, supports the uterus. It forms a double vagina. Tracy greatly improved the operation by restoring the perineum at the same time. The only drawback to its invariable performance is that the adhesion of the vaginal walls would greatly complicate delivery.

A case was given in which the operation was performed, which was entirely successful.

After which Dr. John G. Lee, of Philadelphia, read a paper on

Homicides,

in the course of which he said:—

No further back than 1836, a distinguished European scientist and statistician,* in publishing a work, wherein he endeavored to prove that the human race was placed under the influence of regular and periodic causes, affecting not merely its physical qualities, but likewise its actions, these leading to effects equally regular and periodic, made the statement that "Man is born, grows up, and dies, according to certain laws, which have never been properly investigated, either as a whole or in the mode of their mutual reactions." Such a criticism applied now-a-days to the advance of knowledge, and more especially medical science, would be neither true nor just. For in this era of universal progress no branch of science has advanced more rapidly than the study of medicine; gradually enlarging its fields of research, it has pressed into its service and brought under its dominion everything in nature which could aid in any degree whatsoever in its onward stride. Goaded into action by the ceaseless cries of suffering humanity, ardent and indefatigable men have never hesitated to come to the fore and enter the too often thankless career of scientific research; generously forgetful, in many instances, that the work so laboriously performed by them would only be of benefit to future generations, long after they themselves had fallen and perished by the wayside. Yet, though so much has been done, still more remains to be accomplished; to this end, all facts pertaining to the mental and physical existence of the human species are being made the subject of thoughtful study and careful investigation. And, among the many facts which have been attentively observed, the births, marriages and deaths occurring among given groups of population stand foremost in the interest which their study and the practical deductions therefrom have excited. Especially has the cessation of the organic and material life of individuals of the human race been considered a phenomenon of exceeding interest, and been made the subject of almost indefinite investigation, subdivision and classification. Nevertheless, but little work has been done concerning the mode of death to which this paper has the honor of calling your attention. Though indeed, the first death ever mentioned in the Christian history of the world is a violent death, a homicide, or if we read the annals right, a murder, feloniously committed, with malice aforethought.

* A. Suetelet, Sur. l' Homme et le developpment de *des facultés*, ou essai de physique sociale. Bruxelles, 1836.

After a prolonged study of the dark side of life in a great city, I feel convinced that the juxtaposition of wealth and misery, the forcible association of innocence with guilt, and the eternal shock of conflicting interests usual among large aggregations of men, all combine to wear off sooner the thin varnish of a hypocritical society, beneath which man to a certain extent masks his passions, and become important factors in the more or less continual frequent occurrence of criminal homicide in populous centres.

From December 31st, 1871, until January 1st, 1882, out of a total number of 12,936 cases of deaths investigated by the Coroner's office in Philadelphia, 323 cases were deaths from homicidal violence, falling under the Act of Assembly, previously quoted, or an approximate ratio of 27 homicides to every 1000 inquests. As the population of a city annually increases, so naturally the number of homicides might be expected to augment in a more or less similar ratio. Such, however, has not been the fact, as the following figures shows us:—

Years.	*Homicides.*	*Population.*	*Ratio of Homicides to 10,000 Population.*
1872	32	725,000	.44
1873	23	750,000	.30
1874	28	775,000	.35
1875	44	800,000	.55
1876	46	825,504	.55
1877	34	850,856	.39
1878	31	876,118	.35
1879	28	901,380	.31
1880	31	846,980	.36
1881	26	868,000	.29

In no case does the ratio appear to bear any relation to the population. In 1873, for instance, when the lowest number of homicides were committed, the ratio is .30 to 10,000 souls, as against a ratio of 55 for each of the years 1875 and '76, when the greatest number of homicides occurred. Examining into the frequency of homicide, according to color, we find that of the 323 persons who came to their death by criminal violence, at the hands of their fellow-men, 26 were colored people and 297 whites. Of the 26 colored persons, 20 were males, and 6 females, while of the 297 whites, 202 were males and 95 belonged to the weaker sex.

These deaths took place, according to years, in the following order:—

Years.	*Males.*	*Females.*	*Total.*
1872	22	10	32
1873	16	7	23
1874	19	9	28
1875	28	16	44
1876	40	6	46
1877	24	10	34
1878	20	11	31
1879	18	10	28
1880	17	14	31
1881	18	8	26
	222	101	323

The year 1876 showing 46, to 23 occurring in 1873, the males always exceeding the females; the general yearly average for both sexes together being 32.3, and the separate average by sexes, being for the males, 22.2, and 10.01 for the females.

Though, as might be expected, we find that deaths from criminal violence occur more frequently at the period of life when, the bodies and intellect of individuals of the human species being fully matured, their passions are most difficult to control. Yet, from the tenderest age up to far beyond the three-score years and ten usually allotted to human beings, we find men taking the lives of their fellow-creatures.

Period.	*Males.*	*Females.*	*Totals.*
Under 1 year,	15	16	31
1 to 5 years,	5	2	7
5 to 10	3	2	5
10 to 15	3	—	3
15 to 20	13	2	15
20 to 30	53	31	84
30 to 40	56	21	77
40 to 50	42	11	53
50 to 60	17	8	25
60 to 70	13	1	14
70 to 80	—	4	4
80 to 90	1	—	1
Age unknown,	1	3	4
	222	101	323

The highest number being reached between the ages of 20 to 30, and the next highest between 30 to 40 years, then between 40 to 50 years, in fact, just at the time when the struggle for superiority between members of the human family is at its maximum. The fewest lives were destroyed between the ages of 80 to 90 and from 5 to 15 years.

The mortality from homicide forms no exception to the rule proved by mortality tables in general, that the deaths of adults are slightly in excess of the deaths of the minors. There occured 262 violent killing of adults, to 61 deaths of minors; of the minors 39 were males and 22 females.

Figures relating to the condition in life of the victims, are but of passing interest to us; out of the 323, 174 are recorded as being married, 136 were in a state of single blessedness, while the condition of life of the remaining 13 was not determined. 126 of the 174 married persons were males and 48 were females; of the 136 unmarried, 90 were men and 46 women. No correct record of the nativity of those slain having been kept, we are, therefore, unfortunately, without data sufficiently accurate for use in this paper.

Of special interest to us, as physicians, are the anatomico-pathological causes of death, of which we have fourteen different varieties.

First. Homicide from violence, comprising blows, kicks, and other injuries of a contused character, inflicted with nature's weapons, foreign bodies or falls. Of these we have one hundred and twenty-six cases; one hundred and two of which occurred among men, and twenty-four among women. Entering into a more detailed account of the injuries described under this heading, the causes of death, arranged in their order of numerical frequency, were:—

From causes not defined	38
" fracture of the skull	30
" compression of the brain	24
" peritonitis	8
" inflammation and abscess of brain	7
" inflammation of lungs	6
From congestion of the brain	5
" injuries to the head	2
" rupture of the bladder	2
" erysipelas	2
" tetanus	2
" hemorrhage and shock	1
	126

Second. Death from gunshot wounds occurred in 66 cases, 55 of which were males and 12 females, the lesions being specified as follows:—

From causes not stated	37
" wounds of chest	6
" " " heart	6
" " " throat	4
" " " brain	4
" " " lungs	4
" " " abdomen	2
" " " back	2
" " " pulmonary artery	1
	66

Third. Fatal wounds from the use of cutting instruments were 53 in number, 41 being males and 12 females.

From causes not specified	11
" wounds of throat	8
" " " head	7
" " " chest	6
" " " peritoneum	6
" " " femoral artery	3
" " " subclavian artery	2
" " " heart	1
" " " heart and aorta	1
" " " aorta	1
" " " orbital artery	1
" " " ulnar artery	1
" " " crural vein	1
" " " groin	1
" " " arm	1
" " " leg	1
" " " back	1
" " " erysipelas	1
	53

Fourth. Criminal abortion was the cause of 32 deaths, 29 of the victims being recorded as females, the remaining 3 being males. In this form of violence, the deaths of the fœtus do not appear to have been taken into consideration, by the intelligent Coroner's jury, in those cases where the mother perished. Here it may be well to remark, that the crime of abortion does not come under the paragraph of the act of Assembly,* already quoted, but has been made the subject of a separate clause: "If any person shall unlawfully administer to any woman, pregnant or quick with child, or supposed and believed to be pregnant or quick with child, any drug, poison, or any substance whatsoever, or shall unlawfully use any instrument, or other means whatsoever, with the intent to procure the miscarriage of such woman, and such woman, or any child with which she may be quick, shall die in consequence of either of said unlawful acts, the person offending shall be guilty of a felony, and shall be sentenced to pay a fine, not exceeding $500, or to undergo an imprisonment, by

* Act of Assembly, 31st March, 1860.

separate or solitary confinement at labor, not exceeding seven years."

In the following 32 cases death occurred:—

From causes not specifically defined	18
" peritonitis	8
" hemorrhage	2
" violence in utero	2
" pyæmia	2
	32

Fifth. Of one of the most dangerous forms of homicide, the criminal administration of poison, there are only 18 cases recorded; though it can hardly be doubted that a certain number of instances of this variety of crime may either have escaped the notice of the investigating officials, or else have been passed as suicides or accidental poisonings; 7 of the victims were males, and the remaining 11 were females, the deaths resulting from the administration of the following poisons or drugs:—

Names of poison not given	2
Poisoning by chloroform	4
" arsenic	3
" laudanum	2
" alcohol	2
" opium	1
" sulphate of morphia	1
" corrosive sublimate	1
" muriatic acid	1
" podophyllin	1
	18

Sixth. In fourteen instances life was destroyed by suffocation, ten of the victims being males and four females.

Seventh. Of four persons who perished by strangulation, two were males and two females.

Eighth. Two men were found drowned, with such marks of violence upon them as to warrant the supposition that they had met with foul play.

Ninth. Two infants came to their death from criminal neglect.

Tenth. Two aged females were recorded as having been frightened to death.

Eleventh. One infant was starved to death.

Twelfth. One infant was thrown from a window.

Thirteenth. One drunken woman was saturated with coal oil by her insane husband and then set fire to.

Fourteenth. And lastly, one woman was feloniously assaulted, receiving such brutal treatment that she succumbed to the results of her injuries.

Going further into the subject, we find that massed in groups of months, homicides occurred during the past ten years, in the following order:

July	40.	January	26.
April	30.	June	26.
May	30.	November	24.
February	29.	December	23.
September	28.	October	22.
August	27.	March	18.

July, as we see, heading the list and March ending it; the difference, however, in the mortality of several of the intermediate months being so slight that but little importance need be attached to their order of succession in the foregoing table. Though we cannot help but notice that the majority of criminal killings occur in the warm months of the year. This conclusion becoming even more apparent if we examine into the frequency of homicide, by quarters. The deaths by quarters for the past ten years being as follows:

1st Quarter.	*2d Quarter.*	*3d Quarter.*	*4th Quarter.*
73	86	95	69

The 3d and 2d quarters heading the list here, and the 1st and 4th quarters ending it.

While general meteorological phenomena must undoubtedly exert a certain influence over the frequent taking of human life, what their special effects are we are not able to determine; all observations which we were enabled to make having been unsatisfactory in the extreme. Possibly future observations and comparisons, including a greater number of cases and extending over a longer period of time, may some day give us more definite results.

As an epilogue to the preceding figures, it is of interest to know that in only 5 instances was *lex talionis* enforced, and the supreme penalty exacted. During the decade over which our observations extend, only 5 criminals were executed. All 5 were males between the ages of 20 to 40 years; 2 were guilty of wife-murder; 1 destroyed his paramour, and the remaining 2 killed individuals of their own sex,

Glancing at this statistical compilation, the question naturally arises — what end may it serve? Or to what purpose it may be studied? Admitting that the impulsive actions excited by human passions are not subject to special rules and laws; we cannot but define them as being in themselves but the physiological manifestations of certain physical phenomena, which exert a disturbing influence over cerebral action. Thus, the intense cold of our winters, the torrid heat of our summers, combined with the bodily malnutrition, and the cerebral hyperæmia caused by the excessive use of stimulants, so commonly met with among our poorer classes, must all be factors of importance in the calling into existence of the columns of figures above enumerated, and their more or less constant fluctuations. It being now well known that proper hygienic police regulations not alone tend to diminish disease, but also act as a check upon vice and crime. Medical science has under charge, not alone the supervision over physical and mental disease, but it is more and more becoming the duty of this branch of knowledge to study the climacteric, hygienic, psychological, sociological and moral conditions under which man lives, with a view to remedying and preventing the ravages of disease. Why should not moral suasion and expostulation on the part of the medical adviser be combined with sedative treatment, in cases where an excited mind, the result of a hyperæmic cerebral condition, is apt to give way to the fatal hallucination of imaginary grievances? It is easy to see the power which medical men would be able to exercise over many such instances. Again, a proper moral education, with the development of the nobler qualities of human nature, would more and more tend to render impossible and infrequent those most unnatural crimes—abortion and infanticide; cancers which, gnawing at the very vitals of society, demoralize as well as disable our partners in life

by their pernicious physical and mental effects. It is to the prevention of this form of crime that I would, more than to any other, call the attention of this honored body and the medical profession at large, to the end that all who may be found disguising a criminal purpose under the cloak of a noble science be outlawed by the profession, hounded down and pointed out for prosecution when and wherever detected.

In pointing out, thus tersely, the palliative means against the criminal taking of human life, which medical men (the confessors of the XIX century) have at their command, it but remains for me to terminate with the consideration of the legal aspect of the subject. Elsewhere,* I have had occasion to abundantly describe the procedure of our Coroner's courts, as well as the duties of physicians who may be selected by that official to assist him in his investigations; and will therefore pass that portion of the subject, in order to touch upon another of more importance to the medical profession generally.

In this progressive country, where medicine has in all its branches, successfully rivaled the progress of older nations, it is surprising to find that we have as yet no branch of this science taught in regard to its practical application to the law. Austria, Germany, France, Italy, all have their codes and well defined systems for the guidance of practitioners of medicine, when called upon to assist the State; but on this continent, medical jurisprudence, if at all known and practiced, is certainly in its infancy. No chairs, no teachers, or only nominally so, grace our great and well known centres of medical learning, and it is a well established as well as deplorable fact, that even our prominent practitioners shrink from contact with the law, and decline to give the State the benefit of their wisdom and experience. A condition of affairs due only to the fact that they lack the knowledge of their relations thereto, and do not care to place themselves in the situation of being roughly handled and ridiculed by the flippant and discourteous gentlemen who occasionally practice in our courts of law. Owing to our admirable system of non-centralization and the perpetual struggle for autonomy which is continually taking place between different districts, it has not been possible for our legislators to promulgate laws for the establishment of a health-police and medico-legal officers, as they exist in older countries. And while medical jurisprudence cannot be called a science apart, it is to be defined as the application of the exact principles of medical science to the necessities of the State, for the better administration of public justice. In my official position I have been obliged to give much thought and study to this important question, and long ago came to the conclusion that if physicians knew their relations to the law, both the community and the medical profession at large would be the gainers.

I therefore call upon this honored body, which represents the whole medical fraternity of Pennsylvania, to take such action as the circumstances require; and to this effect, I suggest that this Society make it its duty to urge upon medical faculties, members of the profession and students, the high importance of a thorough knowledge of the principles of medical jurisprudence. To further the advancement of which I also suggest that this Society take steps for the creation of a special section, having for its object the science of medical jurisprudence, or State medicine, at the coming meeting of the American Medical Association.

In the evening, at seven o'clock, the Annual Address by the President, Dr. Jacob L. Zeigler. of Mount Joy, was delivered, in the Academy of Music, after which the delegates were handsomely entertained by the citizens, at their homes.

THURSDAY, MAY 11TH.

The Society convened at nine o'clock. Prayer was offered by the Rev. J. Allan Maxwell. After the usual routine business, the following report was offered:—

Report of Committee on Defective Hearing of Locomotive Engineers.

The Chairman of the Committee, Dr. Laurence Turnbull, of Philadelphia, presented the Report of the Committee on Defective Hearing of Locomotive Engineers, Firemen and Conductors. He states that copies of the first report, of 1881, with its resolutions signed by all the members of the committee, had been sent, as directed by this Society, to the presidents and superintendents of all the railroads in the State, also to the members of the Legislature of Pennsylvania. The subject had elicited much interest, and copies of the report had been sent for from various parts of the United States. The committee were happy to state that the Pennsylvania Railroad Company have adopted rules and regulations for the examination of the hearing of all those in their employ, and no doubt other railroads will follow their example, being of interest and importance to them as well as to the traveling public. In the report will be found a comparison of the results of the examination of railroad employés, as compared with another branch of service, namely, the military, showing its importance both to the army and navy of the United States. The reports of the Health Bureaus of the Prussian and Wurtemberg armies are given for 1874–78 showing that during those four years there were removed, from disability on account of ear diseases, 1883 men. Dr. Turnbull has added to the report an appendix containg new cases with facts and observations from patients, and the opinion of engineers of the great utility of these examinations and the proper successful treatment of such defective individuals.

After which the address on Mental Disorders was delivered by Dr. Chas K. Mills, of Philadelphia.

Criminal Lunacy.

The following were among the subjects briefly discussed: The psychology of crime; the classification of criminals; the relation of crime to insanity; the tests of responsibility in criminal cases; the medico-legal methods of determining responsibility; and the disposal of the criminal insane, including under this last head such questions as the punishability of the insane, the necessity of modifying existing laws relating to

* Handbook for Coroners. By John G. Lee, M.D. Philadelphia, 1881.

the insane, and the importance of establishing in Pennsylvania and elsewhere special criminal lunatic asylums.

The psychology of crime is a subject of the highest importance to society, and the increasing inclination to study it in the scientific spirit and by scientific methods, is a sign of advance.

Crime is often, although not always, the result of the organization of the individual, the outcome of the anatomical conformation and physiological development of the brain.

The distinction between vice and crime should always be borne in mind. Technically, crime denotes transgression of the law, while vice refers to the depravity of the individual. The vicious and depraved are not always criminals; and, on the other hand, criminals are not always vicious and depraved. The psychology of vice is really the fundamental question. Vice, according to Bucknill, is probably more infectious and polluting than crime; and while the latter is often the result of insanity, the former is very frequently the cause of it.

Moriz Benedikt, of Vienna, believes that he has discovered the anatomical basis of criminality in a deficient development of the convolutions of the brain, and a consequent excess and tendency to confluence of fissures. Prof. Parker, of Philadelphia, Prof. Osler, of Montreal, Dr. Mills, and others, have conducted investigations which show that these anatomical peculiarities are present in the lower classes of mankind in general.

Crime, as Benedikt indicates, should be viewed as the psychological act of the criminal. Criminals should be studied, not in mass, but as individuals, just as disease should be, and to a large extent is, investigated. Attempts at the classification of criminals by scientific methods have been made recently by Ferri, Krapelin, Lebon, Lacassagne, and others.

A large proportion of criminals are practically insane; they are not of sound brain and mind. In discussing the question of responsibility, however, too much stress is laid upon words. "Sanity" and "insanity" are really relative terms. In some cases responsibility should be made the test of sanity, rather than sanity the test of responsibility. The question of responsibility, when it is an open one, should always be determined by a painstaking, scientific investigation into each individual case.

Criminal responsibility cannot be adjudged by the test of a knowledge of right and wrong. Criminals, sane or insane, can generally distinguish between right and wrong. They often glory in wrong doing, knowing that it is wrongdoing. In other cases, as Dr. Ray puts it, the particular criminal act becomes divorced in the mind of the criminal from crime in the abstract. Even the presence or absence of delusion does not always constitute an absolute test of insanity and responsibility. Sometimes those who are most insane have no delusions; and, on the other hand, sometimes those who are medically and legally sane have temporary delusions. Responsibility must be measured in doubtful cases by the power of control. It is a question of power rather than knowledge. Could he help committing the crime? is the crucial question. Every scientific aid, medical and legal, should be made use of in answering this question correctly, so that neither society, on the one hand, nor the individual on the other, shall be wronged.

Where does the crime of Guiteau belong? Was his crime, as Dr. Allan McLane Hamilton asserts, simply the result of a low state of the morals for which the individual is solely responsible; or was he, by virtue either of his inheritance or his environment, or of both, insane and irresponsible? It is necessary to make a critical study of the case, before coming to a conclusion. The weight of evidence is, on the whole, in favor of his insanity. As to the form of his insanity—whether reasoning mania, as asserted by Hammond, religious monomania, as claimed by Beard, or an early stage of general paralysis of the insane, as suggested by Folsom—there may be some doubt. His case would probably be considered by most modern authorities as a form of affective insanity, or so-called moral insanity. Many proofs of the existence of insanity and insane tendencies in his relatives, direct and collateral, have been adduced. His life, from about his eighteenth year until the period of his crime, was a record of religious fanaticism and delusion, of lust and immorality, of shiftless wanderings, of chimerical enterprises, of impulsive tendencies and of maniacal outbursts. His conduct before, during, and since the trial—eccentric, outrageous, and showing an utter miscomprehension of public opinion—has certainly not been that of a perfectly sane man. When he shot the President, he was evidently under a delusion as to what he called his duty to the country, and as to the effect which the act would have upon his own future.

Expert testimony was not used properly, nor to the best advantage, in the trial of Guiteau. The trials of criminals, particularly criminals whose lives are at stake, should be conducted in a strictly scientific manner. As the law at present is administered, courts of justice, so-called, become too often courts of injustice, or arenas of public display. Experts should not be partisan. A commission of experts should decide as to the insanity of prisoners charged with crime. The work of this commission should be for the court, not for prosecution or defence. This plan has been recommended by our most thoughtful criminalists and alienists.

It may sometimes be proper to punish criminals who are the victims of some of the forms of partial insanity; but it is in such cases above all others that justice should be tempered with mercy, that punishment should be inflicted, as far as possible, with a view to education and reformation. Where neither of these ends can be attained the punishment should be in the form of seclusion or sequestration, with the view of protecting society.

Our laws with reference to the confinement in asylums of criminals acquitted on the ground of insanity should be modified so as to better meet the requirements of justice in special cases.

In cases of homicidal insanity the law might be so framed as to make imprisonment in criminal lunatic asylums for a definite number of years compulsory, and also to put it within the power of the court and juries to make this imprisonment for life.

Capital punishment in the cases of insane criminals probably does more harm than good. If, as seems probable, Guiteau should go to the gallows with the air of a hero and martyr, his example will incite other insane criminals to deeds of violence and blood.

The experience of the country with reference to a case like that of Guiteau cannot fail to forcibly show forth the great neglect of society to properly guard individuals against criminal lunatics of a certain class. This class is made up of those who, in the expressive language of the street and newspapers, are known as "cranks." While the right of both the sane and the insane to liberty should be carefully guarded, the right of the sane to protection from the insane, should be provided for with at least an equal amount of care.

Too many cranks and lunatics are loose in the land. At a recent meeting of the "National Association for the Protection of the Insane and the Prevention of Insanity," held in New York City, January 20th, of the present year, Dr. C. L. Dana made the important statistical statement, that of the more than sixty thousand lunatics in this country, upward of twenty thousand were outside of asylums.

Mistaken pride often leads a family to cover any facts which tend to show the existence of mental derangement in any of its members, even, in some instances, when the insane tendencies are of such a character as to endanger property, limb, or life. Society is to blame in failing to make sufficient provision for the idiotic, imbecile, and insane; and in not providing, by special enactment, and the cultivation of a proper public feeling, for the separation of individuals, dangerous by reason of lunacy or half lunacy, from the rest of the community.

The founding of special criminal lunatic asylums, like those which have been established in England, would be a step in the right direction. Few institutions of this kind are in existence in this country. At Auburn, New York, is a Criminal Insane Asylum, and at Fulton, Missouri, another, not yet completed. In Illinois an asylum for insane convicts is building. Steps are now being taken in Massachusetts to provide for separating insane criminals from the other insane. The State of Pennsylvania has no asylum of this character. The insane of the vicious classes, and the criminal insane, whether tried or untried, convicted or unconvicted, are the inmates of the same asylum with the harmless, the innocent, and the refined; not infrequently the latter are the enforced companions of the former.

Dr. W. H. Daly, of Pittsburg, then presented an address on "Some Questions Relating to Tonsillotomy."

Dr. J. A. Lippincott, of Pittsburg, Pa., followed with a paper on

Abscess of the Orbit.

Post-ocular abscess, though a very formidable, is, happily, a very rare affection, as attested by the statistics of ophthalmic hospitals, both in Europe and in this country. The symptoms are variable within certain limits, and depend partly upon whether periostitis is the initial lesion, and partly upon whether the disease is acute or chronic, sthenic or asthenic. In acute sthenic abscess the constitutional excitement is especially marked. In asthenic cases the febrile symptoms may be of moderate violence. There is pain and tenderness in and about the eye, redness and swelling of the lids, ptosis, and conjunctival chemosis. At first there is no secretion, but a slight muco-purulent discharge is developed later. In the early stage the eyeball appears to occupy its normal position. Very soon, however, it becomes decidedly and suddenly protruded. The exophthalmos may be so extreme that the cornea may be constantly uncovered, and thus exposed to the influence of mechanical irritants. From this cause, added possibly to some disturbance of the trophic nerves, there may be corneal ulceration, and consequent permanent corneal opacity. The axis of the protruded globe is generally directed downward and outward. The pupil is sometimes contracted and sluggish, even when there is no involvement of the tissues of the eyeball proper—a phenomenon which is perhaps explicable by the fact that the sympathetic nerve fibres are more obnoxious to pressure and other injurious influences than the filaments of the oculo-motor. The sight is usually more or less impaired. The visual field is contracted, and phosphenes are observed. The ophthalmoscope may show dilatation and tortuosity of the retinal veins, or serous infiltration of the disk and retina, or a true optic neuritis. Sometimes the impaired vision is due to the stretching of the optic nerve, sometimes to the presence of retro-bulbar neuritis, and sometimes to other intra-ocular conditions than those mentioned above, such as detachment of the retina, irido-choroiditis and panophthalmitis.

The pus sometimes escapes spontaneously through the lids. The globe recedes somewhat into its cavity; and then, in a favorable case, the opening will gradually heal up, and the eye, by degrees, recover more or less completely its functions. The purulent collection, however, may ulcerate through the orbital wall into the antrum, or nose, or into the cranial cavity, and so produce abscess of the brain.

Orbital abscess may be caused traumatically, as by wounds of various kinds and the lodgment of foreign bodies, or by surgical operations on the eye and its appendages. 2d. By exposure to cold and wet. 3d. As a sequela of severe constitutional diseases, such as pyæmia, erysipelas, etc. 4th. By the extension of the inflammatory process from surrounding parts, etc.

The affections most likely to be mistaken for abscess are tumors, particularly aneurismal and cystic; and frequently, in order to avoid errors in diagnosis, recourse must be had to the exploratory puncture. This should be made not with an exploring needle, or slender-bladed knife, but with a fine aspirating needle, since in employing either of the two former instruments the pus is apt to be wiped off by the overlying tissues. Care must be taken not to remove with the aspirator more fluid than is required to settle the diagnosis, because the tension may be thereby considerably diminished, and the difficulty of the subsequent evacuating incision be thus greatly enhanced.

Treatment.—If the case be seen early, and be

of a sthenic character, ice should be applied about the eye, and the antiphlogistic regimen adhered to. If, however, as is the rule, the patient be feeble, supporting treatment ought to be employed, tonics, nutritious diet, etc. On the slightest appearance of suppuration a free incision should be made, and the contents of the abscess evacuated. The knife should be inserted with its plane parallel to the orbital wall, but with the edge turned slightly away from the eyeball. The puncture may be made either in the retro-tarsal fold, or through the upper lid close to the orbital margin. After the incision, an attempt ought to be made to determine the presence or absence of periostitis, by the cautious use of the probe, and by chemical and microscopical examination of the pus. If the track is long, a tent of oiled lint may be inserted. Poultices should be applied, and gentle pressure instituted and maintained. If there be evidence of necrosis, the opening must not be allowed to close up too readily, and antiseptic solutions may be injected with advantage. Of course, if there is any reason to suspect the presence of a foreign body, careful search should be made with the probe, and, if the offending substance be found, it must be promptly cut down upon and removed.

After which Dr. Chas. S. Turnbull, of Philadelphia, read a paper, entitled

Powdered Boracic Acid in the Treatment of Chronic Purulent Inflammation of the Middle Ear—Otorrhœa.

A most gratifying experience in the use of powdered boracic acid in the treatment of chronic purulent inflammation of the tympanal mucous membrane, the constant symptom of which is otorrhœa, has induced him to consider the antiseptic, or what might be more accurately termed, the dry method of treatment. The use of the syringe is, in his practice, a thing of the past, except in so far as employed for the removal of impacted cerumen, foreign bodies, etc. With his father (L. Turnbull), Knapp, Politzer, Gruber, Schrötter and others, he has had unusual facilities during the past twelve years, in which he has been working in the department of otology, for studying purulent diseases of the middle ear; and although having of late followed quite a new departure in aural therapeutics, has been able to record a much larger than ordinary percentage of absolute cures.

The marked success which has attended the modern, dry, antiseptic treatment of cases under his care has led him to advocate its use in this most common form (in this country) of aural disease. Up to about two years ago he felt like avoiding all cases of chronic purulent middle ear inflammation, *i. e.*, otorrhœas. He examined and treated the same with inward misgivings, because he was a non-believer in all the methods in vogue, and had learned by experience to have no faith in the prescribed forms of cleansing, medicating and managing the ears of such of his patients as suffered from chronic otorrhœa. The odor of the usually worse than fetid discharges was at times actually nauseating, and until he commenced to use Platt's chlorides, a most valuable disinfectant and deodorant, could keep neither finger nor instrument free from the characteristic odor.

The practice of either medicine or surgery gives us more or less pleasure in so far as we are successful, and he confesses that although successful to a degree, scarcely a day passed without his feeling chagrined at his utter want of confidence in the ordinary methods of treating chronic purulent discharges from the ear.

Nitrate of silver was used for polypoid granulations, which sprouted and waxed large under its topical stimulation, while solutions of the same in various strengths now and then seemed to act happily and cure certain cases. Carbolic, chromic and acetic acids, sulphate and sulpho-carbolate of zinc, sulphate of cadmium and copper, alum, permanganate of potassium, etc., were in turn used, and found beneficial in only a few cases. Then tannin as a powder was tried, and still more recently when combined with iodoform and thymol. These dried or partially melted and filled the meatus with an ugly, black mass, which acted as an irritating foreign body, and smelled almost as disagreeably as the purulent discharge itself. Thymol was formerly supposed to cover the odor of iodoform. Patients invariably objected to the odor of iodoform, and the so called "deodorized iodoform," as soon as exposed to the air, smells as badly as the original article; and he is of the opinion that if a deodorized iodoform be procured, it will be no longer iodoform, *i. e.*, from a therapeutical standpoint.

Anything new, and in therapeutics especially, as a means of treatment of that most frequent of aural symptoms, "otorrhœa," must call for immediate and specific attention, not only on account of its practical worth, but also for the greater power it gives every physician to control, yes cure, what hitherto has been generally considered an incurable symptom of a disease of the middle ear.

This symptom of disease of the drum cavity (tympanum) is so frequent in this country that, as is often the case, a symptom of a disease is dignified with a specific title, as is the case with the use of the term "otorrhœa," which frequent usage in medical parlance has caused to be understood as synonymous with the now recognized and self defining name, "chronic purulent (or suppurative) inflammation of the middle ear."

The causes which may lead to the existence of a chronic discharge from the ear are well known to the profession.

Whatever causes tend to provoke an inflammation of the mucous membrane lining the middle ear, or its appendages, may lead to a perforation of the membrana tympani, and a discharge from the ear.

In passing, I must mention that it oftenest occurs in infancy, as reflex (tonic) from dentition, it may be, and is, alas! too often a sequence of the dread exanthemata, inherited taints (tubercle and syphilis) by inflammatory extension from the gastro-pulmonary mucous membrane, nasal, post nasal, supra-post-nasal and tubal spaces, and the much vaunted irrigating treatments for the same. Last, but not least, from exposure, carelessness in cleansing the meatus, too forcible blowing of the nose, bathing,

the use of aqueous solutions of castile soap, instillations of olive oil, glycerine, etc., etc. The invariable tendency of most forms of acute purulent inflammation of the middle ear is to get well of themselves, if it were not that the peculiar conditions of the parts provoked the fermentation of stagnant secretions, the formation of pus "from the emigration of bacteria" (Lœwenberg), and the meddlesome interference of those who never pause to consider the conditions present, but pursue time-dishonored plans of guess treatment, which are, as a rule, dependent upon the fragile experience of empiricism. The curing, *i. e.*, the stopping, of a purulent discharge from the ear is the only desideratum, as it would seem, to many sufferers and their medical attendants; he says that, as a rule, it is not the discharge in itself which does harm; it is a too heroic treatment and the subsequent process of cicatrization, which to a greater or lesser extent damages the hearing power. It calls for intelligent management, as well as treatment, so that the functions of the acoustic apparatus (the tympanum and its appendages) may not only be preserved intact but kept in motion.

He has often been met with the objection, and, confesses it is generally well put, "Why dry up the purulent discharge from the ear, since, when suppuration is actually taking place, patients as a rule hear best?" As the discharge ceases in a case of otorrhœa hearing power is, as a rule, materially diminished; but he always makes reply by asking the question: "Which is the better, half a loaf or no loaf?" *i. e.* to stop the discharge and save some hearing which will be permanent, or allow the discharge to continue, and in a greater or less time lose all hearing and become hopelessly deaf. Then, too, if only for the abolition of the disgusting fetor which accompanies such cases, if for nothing else, it is well worth while risking any fancied extension of the inflammatory process. Children with "running ears" are tabooed by their class and playmates. Adults are tolerated, while, self-conscious of this sickening odor from their ears, they shun society, and imagine, not without good cause, that every one is aware of their infirmity. The majority of such patients are generally willing to forego the greater or less amount of loss of hearing power if the offensive discharge can be prevented.

Beyond a doubt a discharging ear is a thorn in the flesh, to be withdrawn in the shortest possible time. Apart from the risk of damage, from a chronic purulent middle-ear inflammation and its otorrhœa, to the hearing and subsequent happiness of the individual, is the undoubted compromised condition of the same unfortunate individual's health. Fetid discharges run down the Eustachian tubes, and poison the system. This is no fancy deduction, but a solemn truth. He points at least ten cases treated within the last six months, where children have presented themselves in a chronic septic condition consequent upon the fact stated. By simple cleansing of the ears and teaching his patients how, by Valsalva's method, to blow the pus outward into the meatus, which he keeps filled with an antiseptic powder and not with cotton, he has met with most gratifying results in these same children, who, from pale and emaciated subjects, have grown into fat and ruddy specimens of humanity.

He has also been met with the objection that "if these discharges from the ear can be stopped, the disease will go to the brain." This idea had its origin in the fact that, heretofore, such heroic measures were used to check the discharge, such caustic solutions were poured into the ears, because no intelligent treatment was employed, and as in the majority of cases no careful ocular inspection of the parts was made, extension of disease to the inner ear or even brain resulted.

Concerning the "insufflation" of powder into the external auditory meatus, he has never been satisfied with the procedure, and says he was always forcibly reminded, on attempting such "insufflation," of the familiar trick of trying to blow a light paper ball into a bottle, which lies on its side. The harder one blows the more certain is the ball to fly out, rather than into the empty bottle. Precisely the same thing occurs when the attempt is made to insufflate powders into the auditory meatus; because the return current carries it all out again, leaving little or none in the meatus. The operator generally gets the most in his face. This point will be appreciated by those who have attempted to employ powdered *iodoform* in this way. Better drop one-fourth of the quantity proposed to be insufflated through a clean speculum. The ear is not to be syringed; it should be cleansed with absorbent cotton. A meatus as tender, and swollen, and excoriated, as they usually are in otorrhœas, can be cleansed with cotton on a probe. It cannot be done by guesswork nor in the dark. Unless the meatus be thoroughly illuminated, every pledget will, in the majority of cases, except in experienced and careful hands, impinge against one or the other side of the wall of the meatus, and cause pain, exudation, etc.

With the forehead mirror adjusted so as to illuminate the meatus, the (outer) cartilaginous portion of the meatus can be thoroughly cleansed. Having gone so far, a speculum is carefully introduced, *illuminating as I proceed*, and through this (unless the meatus be unusually large, when the speculum can be dispensed with) the inner (osseous) portion can be cleansed, down to the membrana-tympani, or even further. So much for the meatus. Now the tympanum must be cleansed. He never attempts to wipe through or into a perforation, but while the patient, by Valsalva's method, blows out any intra-tympanal secretion, wipes it up; or in case of Valsalva's method being impossible or impracticable, he forcibly inflates with Politzer's air douche, and so frees the tympanum by blowing any collection into the external meatus.

If the cleansing be carelessly done more discharge is provoked and an artificial eczema, aggravated by the powder used, defeats the objects sought by a thorough cleansing. As a rule, all applications of any powders become painful when they enter the tympanal cavity, and more especially as they dissolve and run down into the Eustachian tube, through which experience has taught him he dare not allow even pure water to pass, if we in any way consult the comfort of

our patients. Solutions of borax, or better, boracic acid water and glycerine, may be used if the sensitiveness of the parts or the character of the secretions collected therein do not allow the use of the cottoned probe. Experience in the procedure of cleansing is absolutely necessary to success, and the operator must make up his mind to conscientiously don the forehead-mirror and patiently and carefully, under a good illumination, wipe out the meatus.

Having cleansed the meatus, the speculum is to be removed and thoroughly dried, inside as well as outside, and with it in situ, the powder is to be poured into the speculum ad libitum. As the powder is filled into the meatus, through the speculum, it is packed, layer upon layer, not tightly, but firmly, meanwhile gradually withdrawing the speculum until it reaches the mouth of the meatus.

He has given up the syringe as a means of treatment, and has adopted the dry antiseptic method and the exclusive use of *powdered boracic acid*, which, in all chronic cases, he packs and repacks into the meatus until there is a cessation of all discharge.

It is not then that he would claim, for his father any discovery, but simply credit him for having first introduced "Bezold's antiseptic treatment" and perseveringly employed, and while advocating taught the use of, boracic acid powder for the treatment of "otorrhœa."

He described, at length, the exact details of the method which he considers indispensable to a successful use of powdered boracic acid for "otorrhœa," and furthermore, from his own experience and observation, says he has been led to consider this treatment as specific, because he has cured every case of the hundreds he has treated and kept records of for the past three years.

From that time to the present, with but few exceptions, the treatment recommended by Bezold was given a trial, but although Politzer, of Vienna, recommended it highly, and Cassells, of Glasgow, did the same thing, no one was satisfied that the plan of treatment was particularly efficacious, or to be particularly preferred more than many others.

The great mistake, as he has discovered, was in the fact of many experimenters not having observed Bezold's instructions, viz: that *the boracic acid must be nicely powdered.*

Oftentimes one packing is enough. In other cases the packed powder was washed out in a few days, but he persevered, and has always been rewarded for any trouble in filling and repacking. If the discharge ceases, and leaves a hardened mass of discharge and powder, etc., filling the meatus, it must be removed—but not by force, nor by syringing. It must be softened by the instillation of warm *fluid cosmoline* (petroleol), which has the charming recommendation of not becoming rancid by heat, etc. As the mass softens it may be delicately picked loose and blown out of the meatus, by the rubber bag of a Politzer's air douche.

Perforations are healed, and large ones at that; tympanal mucous membrane becomes almost normal in appearance, purulent secretion and all odor is removed, and "running ears" are absolutely cured, by this most valuable antiseptic agent.

Solutions of boracic acid powder, in equal parts of glycerine (which will partly dissolve it) and water, ten to forty grains to the ounce, are to be recommended in acute purulent inflammations of the middle ear, or even in chronic purulent inflammation, especially those occurring in small or unruly children. Such a solution should be warmed, well shaken, and dropped into the ear twice or thrice daily. Where perforations do not heal, on account of their great size, or sclerosis of tympanal mucous membrane, etc., he recommends most highly *powdered boracic acid*, suspended in fluid cosmoline, in varying proportions, warmed, *shaken*, and dropped into such ears once or twice weekly.

Instruments used in aural surgery should be kept in or dusted with powdered boracic acid. He has seen some forms of parasitic otorrhœas transferred from patient to patient, and even with the most careful surgeon a case of aspergillus is often followed by one or more fresh ones, occurring in those of his patients who have been treated about the same time.

In this connection he states that after careful microscopic investigations, and the study of clinical facts pertaining thereto, all the so-called varieties of *aspergillus* which are usually divided, according to their apparent color, into different species, are but one and the same fungus, as it undergoes the successive changes from white, yellow, red, or purple, to black, each representing successive stages of development of the same fruit, which, when fully matured, is *black* (nigricans).

Purulent tuberculous inflammation of the mid dle ear can be dismissed in a few words: Do not expect to cure such; it cannot be done.

Irritating medicaments, as glycerine, and particularly solutions of castile soap (castile soap solutions have been the cause of chronicity of one-fifth of all the otorrhœas which he has seen in children) the tinctures, oils which become rancid, etc., should be kept out of the ear, and the parts, gently cleaned with absorbent cotton, will, in the majority of cases, cure themselves. If the discharge becomes fetid, antiseptic solutions had better be used as instillations, and under no circumstances does he allow the ear to be syringed. He is using fluid cosmoline entirely in his practice, and as this mineral oil does not become rancid, and so induce parasitic inflammations, it is best for the purpose, and may be conveniently used as a vehicle for powdered boracic acid, powdered extracts of opium and belladonna, morphia, atropia, etc. Boracic acid was first obtained by Homberg (1702) and was formerly known as *sal sedatious hombergi.* It is prepared by adding hydrochloric acid to a hot solution of borax, and crystallizes in white, translucent scales of a white pearly lustre and of a slight acrid taste. Crystallized boracic acid is insoluble in ether, soluble in alcohol, glycerine and slightly in water.

Boracic acid possesses decided antiseptic, antifermentative and deodorant properties. It arrests fermentations and putrefactive decomposition, and is destructive to minute organisms, bacteria, vibrios, etc.

Borated cotton is of no use whatever, in aural surgery, the ordinary absolutely clean absorbent cotton being preferable, and especially so when dusted with the dry powdered boracic acid. It is by no means an easy undertaking to pulverize the scaly crystals of boracic acid, and once in the mortar they must be bruised and pounded instead of rubbed, and all careful pharmacists use a bolting cloth to make the powder impalpable; the process at best is a tedious one.

He dwelt at unusual length upon the minutiæ of what he was advocating, *i. e.*, the dry method of treating otorrhœa with powdered boracic acid, since to secure success every step described required to be carefully considered and scrupulously carried out.

This method he most earnestly advocates as well worth a trial, and says, cease syringing ears except for the removal of cerumen and foreign substances, and rely upon powdered boracic acid. He adds, look upon water and glycerine, and the much extolled and cursed castile soap solutions as local irritant poisons. He concludes by stating, that success awaits those who will but adopt this method, which, at first sight apparently arduous, will eventually prove most profitable, both to patient and surgeon.

Following Dr. Turnbull's paper Dr. E. J. Jackson, of West Chester, read a paper on the

Comparative Action of Certain Mydriatic Alkaloids.

Having spoken of the uncertainty prevailing as to whether these drugs were identical in their physiological and therapeutic properties, or as to how they differed, if they did differ, in these respects, reference was made to the assertion of Prof. Landenburg, that daturia, duboisia, and hyoscyamia, are chemically identical in all respects. A study of the physiological action of these three drugs was the basis of the paper. It was found that on frogs the symptoms produced by each of the drugs were, indisposition to move, and general paresis, going on to complete abeyance of voluntary movement, and great diminution of reflex action. This stage, after several hours, gave way to a condition of tetanus, which lasted some days, when the frog had received $\frac{1}{1000}$ of its weight of the alkaloid.

In a series of experiments on himself, the writer had taken $\frac{2}{3}$ of a milligram of each alkaloid hypodermically. This produced a temporary fall, followed by an increase of the pulse rate, by giddiness, dryness of the throat, affection of the eyes, increase of urine, and headache. The subjective symptoms seeming most severe with hyoscyamia and least so with daturia; the pulse rate was equally affected in all cases.

Another series of experiments was to determine their local action on the pupils and accommodation. With the amount of the drug employed (one drop of a $\frac{1}{1000}$ solution) dilatation began for daturia at 22 minutes; duboisia at 2½ minutes, and hyoscyamia at 21 minutes. The pupils became dilated to the maximum. The accommodation fell from 9.75 dioptrics to 4.8 D. for daturia, 3.2 D. for duboisia, 2.3 D. for hyoscyamia. Recovery of pupil and accommodation occurred simultaneously, for daturia at 6 days, for duboisia at 6½ days, and for hyoscyamia at 6¾ days. The above results were the means of three trials with each drug in the same person. The writer thought that whatever value might be set upon the results of this study, it seemed to favor the idea that the three drugs in question were physiologically identical.

Dr. Jos. Hearn, of Philadelphia, then presented a paper on "The Nature and Treatment of Rodent Ulcers," after which the Society adjourned. The proceedings of Thursday afternoon and Friday will be published in our next issue.

Insanity from Drugs.

Dr. H. H. Kane, of the De Quincey Home, Fort Washington, New York City, requests information from the medical profession on the following points:—

1. Have you ever seen any cases of insanity, temporary or permanent, or any deviation from the normal mental or moral state, that could be traced directly to the use of a single large dose, or the continued use of opium, or any of its preparations or alkaloids?
2. Of what type was such insanity? Give symptoms.
3. State patient's age, sex, civil condition, and occupation.
4. What was its duration and result?
5. State color of patient's hair, eyes, and complexion.
6. Was there any hereditary tendency to insanity, or any history of alcoholism, grave nervous disease, or any drug habit in the patient's ancestors?
7. What amount of the drug was used, and for how long a time?
8. What line of treatment was pursued?
9. Please answer the same questions regarding the use of chloral hydrate.
10. Please answer the same questions regarding the use of bromide of potassium, or any other drugs.

Stamps will be returned for all answers. When so requested, communications will be treated confidentially, and a reprint of the article embodying the results of such statistics will be sent to each correspondent.

M. Pasteur.

M. Pasteur has been inaugurated a member of the French Academy. He was received on April 27th, as a successor of the late M. Littre, on whom M. Pasteur, in his reception speech, made a fierce attack. M. Ernest Renan replied to the speech.

Dr. Lamson.

Dr. Lamson, the American physician who fatally poisoned his brother-in-law in England, with aconitia, was hanged April 28th. He virtually confessed his guilt.

—A medical gentleman, known to the readers of this Journal, who proposes going abroad early in July, will, if desired, take professional charge of any invalid who may wish to secure the benefit of a trans-atlantic voyage. Address "J," care of REPORTER.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1316.] PHILADELPHIA, MAY 20, 1882. [Vol. XLVI.—No. 20.

Original Department.

Communications.

A CLINICAL LECTURE ON IDIOCY AND IMBECILITY.

Joint meeting of the Medical Societies of Delaware and Chester Counties,

BY ISAAC N. KERLIN, M.D.,

Medical Superintendent of the Pennsylvania Institution for Feeble-minded Children.

Before introducing to you a number of cases of mental infirmity, all included under the generic term of idiocy, I will touch upon some points preliminary to the study of our cases.

Idiocy is a widely spread and increasing infirmity. Owing to the great reluctance of families to expose to the average census collector the skeletons of their homes, and because of the very imperfect methods adopted, the census statistics are entirely unreliable for any scientific purpose, and we are almost without any sure guide as to the proportion of this class in a community.

The ratio of foreign countries is about as follows: In England 1 to 771 of population; In Scotland 1 to 800 of population; In Sweden 1 to 521 of population.

In the United States the number of idiots, according to the census of 1870, was 24,395, or one idiot or feeble-minded person to every 1376 of population. The great inaccuracy of this return is known to all who have given the subject any attention.

For example: The number of idiots in Illinois, according to the census of 1870, was 1244. A census taken by the Board of Public Charities, in the same year, drawn from correspondence with practicing physicians, made the number 1738; but there were evidences of great unreliability in even the latter: *e. g.*, Cook county, with a population of 350,236, reported no more idiots than Morgan county, with a population of only 28,500. The result of the investigations of the State Board of Charities of Illinois was a published opinion that the number of idiots was greater than the insane, and that the ratio was at least 1 to 867 of the entire population.

If we apply these figures to a few of the States, we have, within their populations, the following numbers of idiots and imbeciles:—

	Population.	*Idiots, etc.*
In Pennsylvania.....	4,282,786	4939
" New Jersey.....	1,130,983	1304
" Indiana.....	1,978,362	2281
" Georgia.....	1,539,048	1775
" Texas.....	1,592,574	1836
" Wisconsin.....	1,315,480	1517
" Michigan.....	1,636,331	1887
" Maryland.....	934,632	1078

These aggregates are more than those of the insane, and more than those of the blind and deaf mutes put together.

Are idiots and imbeciles increasing in numbers at a rate greater than that of the general population? An affirmative statement is made to this inquiry, by the Board of Public Charities of Massachusetts; a decidedly contrary and more hopeful view is taken by statisticians of Great Britain; the difference of opinion may result from a growing precision in Massachusetts in the collection of returns, through which cases of idiocy hitherto unreported are finding their place in the returns of later years. Let us now examine the authorities, for a statement of the nature of idiocy and imbecility

Griesinger says the essential character of all idiotic states is weakness of the intellect; the fundamental disorder he makes a weakness of perception.

Seguin, senior, defined idiocy to be a specific infirmity of the cranio-spinal axis, produced by deficiency of nutrition in utero, and in neo-nati.

Ray, adopting Esquirol's classification of insanity, considers this affection as *defective development of the faculties*, as distinguished from lesion of the faculties *subsequent to their development.*

The Superintendents of American Institutions for the Feeble-minded, in their session at Columbus, in 1877, aware of the inadequacy of any definitions of this complex subject, tried to embrace it under this formula.

*"Idiocy and imbecility are conditions in which there is a want of natural or harmonious development of the mental, active and moral powers of the individual affected, usually associated with some visible defect or infirmity of the physical organization, or with functional anomalies, expressed in various forms and degrees of disordered vital action; there is frequently defect or absence of one or more of the special senses, always irregular or uncertain volition and dullness or absence of sensibility and per ception."

The classification of the innumerable forms of idiocy and imbecility is as difficult as a definition. Having recourse to the older authorities on insanity, we encounter variance of opinion, prejudice of statement, and fanciful conceptions, which have affected to a most embarrassing degree the medico-legal literature relating to idiocy and imbecility.

I need but refer to the classification of Hoffbaeur, quoted so largely in Ray, but quoted, too, with the dissent of Esquirol, "that it savors more of the labor of the 'closet,' than of rigid and faithful observation of nature." Indeed, no classification, and no description, can ever be made to fit the subject so accurately as not to omit many individuals and slight some entire groups. Two modern writers—one, Seguin, practical teacher of the idiot, physiologist, metaphysician; the other, Ireland, physician, student, writer—these two offer their classification, in the two unlike but interesting volumes they have published.†

Ireland, the more recent, introduces his classification by saying: "I found it was necessary to have some arrangement in order to say clearly what I wanted to say. Coming to the study of idiocy after having gained some experience in medicine, I have from the beginning viewed it from the standpoint of pathology, and my idea of idiocy is compounded of the following classes, which are generalized from individual, existing idiots, who resemble one another by having the same or similar disease, as they resemble the type of idiocy by having mental deficiency along with a corporal disease:—

1. Genetous idiocy.
2. Microcephalic idiocy.
3. Eclampsic "
4. Epileptic "
5. Hydrocephalic "
6. Paralytic idiocy.
7. Cretinism.
8. Traumatic idiocy.
9. Inflammatory "
10. Idiocy by deprivation.

The faultiness of this classification is evident in the facts, that an individual in any single class may be found in two or more of the other classes, and also that it omits from consideration entirely the essential features of idiocy—the mental deficiency. There is nothing in the mental incompetency of a hydrocephalic idiot, or a paralytic idiot, that is peculiar, one from the other.

But Ireland's classification has a value that should not be lost sight of; it suggests pathological changes or sequences as underlying the infirmity, as no doubt is the case in a great majority of our cases, while it furnishes descriptive titles with certain meanings, for use in writing and illustration

Seguin, the first systematic writer of experience on the subject. assumes that the mental and moral features of idiocy are dependent on conditions of the nervous system, and proposes a classification based upon the seat or location of these underlying physical conditions. "The remote cause or source might be physiological or pathological; the immediate cause was in abnormal conditions, either of the central nervous masses, or in the nervous apparatus radiating from those centres, and which connects them with the individual environments." Proceeding from this, Seguin speaks of the essential forms of idiocy, thus:—

"1st. The chronic affection of a whole or a part of the central nervous masses, which is characterized as *profound idiocy.*

"2d. A partial or total affection of the nervous apparatus, which ramifies through the tissues, and presides over the life of relation, the result of which is *superficial idiocy.*"

He also describes a class of cases, under the head of "backward children," in whom there seems to be a mere *functional torpidity* of the nervous system.

He refers at length to the many maladies with which the different forms of idiocy may be accompanied, speaking of them as *accessory*, and predicating a certain relation between these

* Proceedings of Asso. of Med. Of. of Am. Inst's. F. M. C., p 20. J. B. Lippincott, 18.

† Idiocy: and its Treatment by the Physiological Method. By Edward Seguin, M.D. New York: William Wood & Co., 1866.
On Idiocy and Imbecility. By William W. Ireland, M.D. Edin. London: J. & A. Churchill, 1877.

accessory maladies and the primitive infirmity itself. Dr. H. B. Wilbur, whose experience has been larger than that of any other observer in this country, is "disposed to leave the subject of classification on this physiological basis, where Dr. Seguin placed it more than thirty years ago."

For the common use of our own institution, I have adopted a simple classification, which denotes the grade of the individual, from a somewhat practical standpoint, and which assigns him at once to his rank and associates.

Following Greisinger, I name two conditions of IDIOCY, the *apathetic* and the *excitable;* and under these have classed as idiots those whose intelligence is so slight that we can detect no reasonable basis on which to give anything more than asylum-care so long as they shall live; that is, subjects for habit training only. Next and higher there is a group which, for a better name, may be called *Idio Imbeciles.* I recognize three groups of *Imbeciles.* The lowest group, on the confines of idiocy, are susceptible of some culture of the hand and eye, have a slight command of language, sign or vocal, in communicating their desires, and a low degree of attention, imitation, etc. The middle-grade imbeciles are superior to the low grade in the qualities named, while the high or best grade are possessed of all the attributes of intelligence in a limited degree; they are taught to read and write, in some instances fluently; to calculate minor questions of arithmetic, and approach the lower range of common intelligence in their relations to life as found among the ignorant; in their most advanced grade they are lacking only in those powers of discrimination, judgment and will power, the attributes of a sound man; if they exercise them at all it is in mimicry of associates and superiors, rather than from their personal possession.

Another class of imbecile children is now very distinctly recognized as an increasing product of the excesses and abnormalities of civilization. They may be found more commonly the subjects of neglect, born or drifting into our Almshouses, or quite frequently in the Refuges, where they are sentenced for incorrigible behavior or petty crime. Under the designation of "moral idiots," they figure in some of the works on Insanity; called so because, in many, the perversion seems to be mainly in the display of criminal or vicious intent, without responsibility, or without will power to control the impulse. There is usually a history of family eccentricity, or partial insanity, back of the child. They are denominated cases of Juvenile Insanity.

Such, then, is the simple classification adopted in this Institution.

I. Idiocy. (*a*) Apathetic; (*b*) Excitable.

II. Idio-imbeciles.

III. Imbecility. (*a*) Lower grade; (*b*) Middle grade; (*c*) High grade.

IV. Juvenile Insanity.

I will now present for your observation a number of cases, and in their description will make use of the three classifications I have cited; that of Ireland, pathological; that of Seguin, physiological: and that which rules this Institution in our domestic management of three hundred and fifty inmates. The facts of etiology and treatment will be related as they bear upon individual cases brought before you. The first group of cases I present are those under the denomination of

Apathetic Idiocy.—The type of the class is this helpless, gelatinoid creature, Willie F., 10 years of age, so limp and structureless that, in the language of the nurse, "he doubles in three, like a clothes horse, when lifted from his bed." The only noise that interests him is that of a bell; the only object he ever seems to look at is his hand; he cries when he is hungry; he enjoys being held and rocked; and shows actual delight when bathed; with his great, luminous, soft jet eyes, he reminds one of a seal; perhaps his intelligence is rather below that of a trained seal; it is certainly not that of a babe four weeks old. He is a profound, genetous idiot, with epileptic complication. The oldest sister is deaf and dumb; the second sister is an epileptic; the third child is an idiot of precisely the same grade as this, and is now in our Asylum department; this is the fourth child of the family; both idiots were born club-footed. Four children, all males, died under 17 months of age, and there are younger children, of whom it is alleged that they are weak-minded. Acute phthisis arrested the mother at 41, and put an end to this fearful line of idiocy. Phthisis seems to have existed in the family, and whatever other tendencies to blood degradation there may have been, were intensified by a union in marriage of first cousins. The father is a man of low intelligence, neurotic, and of small stature.

Edith B., aged 10; mute; dwarf; helpless; actuates nothing; her only expression of common wants is a low moan or cry; she rewards the faithful nurse by a smile, and recognizes the epithet "baby," which has been applied to her; she sleeps well, and enjoys a bath; she has passed through critical sicknesses.

Willie, aged 3½; of stronger physique than the others, with excellent teeth, and sensory

perceptions more alert; it is fair to hope that this child may develop under the favorable circumstances of his present surroundings. The child had convulsions during the first six weeks of his life. There is a suspicion of venereal taint in the father's history, who is of consumptive lineage and an invalid. The mother is a faithful domestic, below average intelligence, and had severe convulsions in her infancy.

Ida H., aged 21; genetous, apathetic and dwarf idiot, of a better grade than the three preceding cases; but there is extreme vacuity of intelligence, and absence of any self-hood; utters a few words, and formerly sang snatches of tunes; indeed, tune is not infrequently found in idiots, even of this grade; one whose intelligence is not higher than Ida's has been found automatically singing the difficult passages of L'Africaine, after hearing the music practiced but a few times in a hall of these buildings, quite remote from where she was sitting.

The history of this dwarf is a gross page in etiology. I will quote from a correspondent: "This is the fifth child; the oldest two are sound in mind, but of highly nervous temperament; one sister is deaf and dumb; one brother weak-minded; three died in infancy—one of epilepsy, one was still born, and one died of diarrhœa. The mother and four of her brothers and sisters were all choreic; also the mother's mother; chorea, of a grave character can be traced far back in the mother's ancestry; the mother was an invalid all her married life."

Idiocy, Excitable.—Asher C., æt. 26. Some years ago application was made for the admission of Asher, by a western physician. He thus described him: "He is exceedingly repulsive; in appearance and actions more like a gorilla than a human being; he is kept in a yard or pen, where he runs about in a naked condition; every article of clothing he tears and throws to the hogs. His mental condition seems almost a blank; he has never spoken a word, and his temper is sudden and violent."

We admitted Asher, and believing him to be human, endeavored to make him realize it also; swings, ladders, etc., were used in various ways, as a means of diversion and employment. At first the tearing of clothes was of daily occurrence. Now he seldom tears anything if it be in good condition, but if a button be found off, or a seam ripped, he tears the garment to shreds. He can talk well enough to be understood by any one who is accustomed to him, and will never go to bed without kneeling beside his attendant and going through his form of prayer, the language of which is incomprehensible to the bystander, but his devotion, nevertheless, is touching. He is very helpful in the morning, dressing the smaller and weaker boys of the Asylum with surprising rapidity and dexterity, and is as particular about their garments as about his own; he will never dress a boy in anything that has not all the buttons properly sewed on. He particularly enjoys braiding seven strands of manilla rope for mats, an exercise introduced for the benefit of the lower grade of Asylum inmates. Asher is liable at any time to relapse, and if not under vigilant care, would, in a week, be the "gorilla" described by his family physician.

In the background of many of these cases of excitable idiocy is a family tendency to insanity, and the pathological condition of this sad creature is doubtless that of chronic mania.

When three weeks old Asher had continuous spasms; at four months "was afflicted with head dropsy, and was very low for three weeks; after his recovery was strong physically. There are two brothers and one sister living, who in body and mind have no constitutional peculiarities. A fifth child died of cholera infantum at four months.

"On the father's side there was a great deal of neuralgia and sick headache, on the mother's side paralysis. The grandparents on both sides were addicted to tobacco in excess, and on the father's side to alcoholic excess, as well. The father was addicted moderately to alcoholic drinks, and both parents to tobacco. The father had always been subject to neuralgia, sick headache, and nervousness, was of a very melancholy nature, and though successful in his business and domestic relations, commited suicide in a fit of despondency.

I will call your attention briefly to a few additional cases of excitable idiocy, each illustrative of certain points in this study. Amie F., aged 8 years, mute, wild and vicious, biting any one she can reach, with a chronic nervousness in the act that suggests its irresponsibility. She bit her mother from the time she was conceived; an unwilling and unhappy conception, which the mother admits to have made every effort to abort. A light-headed father, who had run his career of licentiousness, a simple-minded mother, and the unrest of Amie's fœtal life, are circumstances testifying to this sequence; a genetous, excitable idiot.

C. B., aged 20 years, is readily defined as a typical microcephalic idiot, who, but for the discipline she is under, and to which she happily

and easily submits, would be of the excitable variety, destructive, noisy and troublesome.

The cranial measurements are as follows: Fronto-occipital diameter, 5¾ inches; transverse diameter, 4½ inches; greatest circumference, 16 inches.

(To be Continued.)

MARTIN'S BANDAGE IN THE TREATMENT OF FRACTURE OF THE PATELLA.

BY WILLLAM A. BYRD, M.D.,
Of Quincy, Illinois.

Judging from the number of methods devised for the treatment of fracture of the patella that have been published, one must conclude that it is one of the most difficult fractures to treat of all that occur to the osseous framework of the human body. It has been my good fortune to see but few such accidents, and to have the sole treatment of but one. In May, 1876, I published an account, in the New York *Medical Journal*, of, I believe, the first case treated by suture. It was treated successfully by the late Dr. Geo. McClellan, of Philadelphia. I quoted it to condemn it, and it has been quoted by Dr. Hamilton, in his treatise upon "Fractures and Dislocations," sixth edition, in these words: "Dr. Byrd, of Quincy, Ill., says that he had, as early as May, 1876, in the New York *Medical Journal*, called attention to the fact that Dr. Geo. McClellan, of Philadelphia, had made the same operation, only without the carbolic spray, many years ago; but I do not think we need to feel ambitious to establish for ourselves a priority of claim in this matter." During last summer, I witnessed the treatment of this fracture by the silver wire ligature, in one of the largest and best hospitals in London, the operation being done by a most expert operator, with assistants whose reputation was world-wide, and I must say, that after seeing the operation, I have a worse opinion than ever of it. The treatment by Malgaigne's hooks is only less barbarous; and of most of the other methods that have been devised, they are tedious, painful, and uncertain in their results. Perhaps this can be said in a less degree of Dr. Hamilton's method than any other. His method I had decided upon adopting, and the reasons for varying from it will appear in the following history of a case:—

January 9th, 1882, I was called to see Henry Meyer, an athletic laborer, aged 28 years, who was said to have received a sprain of the knee. When I saw him, I found that, while out hunting, his foot had slipped, and in his endeavor to regain his equilibrium, the right patella was fractured at the junction of the middle and lower third. The fragments were separated sufficiently to admit the thumb being placed between them. There was considerable effusion into the joint, with great pain. Not being able to get a leather or shellac-cloth splint at the time, I took an inch-thick pine board, that would extend from the sub-gluteal fold to below the heel, and so shaped it that it was about as wide as the greatest diameter of the leg, except just opposite the joint, where I made projections, so that the bandage, passing around the limb and splint, would exert traction upon the fragments in such a manner as to draw them together (see the cut in Dr. Hamilton's "Fractures and Dislocations," sixth edition, p. 523) and not slip. The splint was well padded, so as to fit the limb comfortably, and the bandage was applied as on page quoted above; "a roller, made of unglazed cotton cloth, is then turned around the leg and splint to within about three inches of the knee, and another from the upper end of the splint, over the splint and thigh, to within three inches of the knee. While an assistant approximates the fragments with his fingers, the surgeon makes two or three turns with a third roller around the limb and splint, close above the knee; after which the roller descends below the knee, and an equal number of circular turns are made close below the lower fragment of the patella; and finally, a succession of oblique and circular turns are made above and below the fragments, which turns are to approach each other in front until the whole of the patella is covered, the last turns being again circular. The dressing now being completed, the rollers are carefully stitched to the cover of the splint, through its whole length, on both sides, and the limb is left supported in the elevated position by a suspending apparatus, or by some other mode which will insure its maintenance in this position." I quote the above for the reader to understand that all Dr. Hamilton's details were carried out, with the exception of the substitution of a pine board for a splint, instead of shellac cloth. This treatment was kept up for a week, but the effusion and swelling not diminishing, I applied a Martin's rubber bandage, instead of the cotton one, from the ankle to the gluteal fold, expecting to get absorption of the effused fluid, and also by the constant elastic pressure to overcome any tendency to spasm in the quadriceps muscle. I had intended to remove the fluid from within the joint, with the aspirator, before applying the bandage, but having removed the bandage from another patient just before calling to see this one, and not having the aspirator with me, I

concluded to apply the bandage, as I had it with me, and if necessary aspirate the next day. When I came to see him the next day the swelling had subsided so much, and he was feeling so comfortable, that I decided not to aspirate. From this time on he made a speedy recovery. At the end of nine weeks I let him get upon his crutches, and to day he walks well on the limb, although there is yet considerable stiffness of the joint. The union is so intimate that it is with the greatest difficulty that the site of the fracture can be made out.

I do not know but that the board splint could be replaced, with advantage to the patient, by one of shellac or of plaster-of-paris, allowing the patient to go upon his crutches at once, applied to the posterior half of the leg, as suggested by Dr. Hamilton. The shellac, on account of its weight, would, of course, be the best. In using the india-rubber bandage it should be taken off at le st once a day, and the limb washed. to clean off accumulated epithelial scales and perspiration ; the bandage should then be washed dry and re-applied. There can be but little doubt that a great deal if not the whole of the displacement of the fragments is owing to the effusion within the joint, and it would be a good and safe practice to aspirate before applying the bandage ; for my views in regard to aspiration of joints I refer the reader to the Baltimore *Independent Practitioner* for September, 1880, or to a very valuable paper by Dr. Wm. Judkins, of Cincinnati, Ohio, published in the New York *Medical Record*, April 8th, 1882.

I really am not sure but that excellent results might be obtained by the treatment of fracture of the patella by the use of Martin's bandage, unaided by any splint, as the elastic pressure, if properly applied, would keep down swelling, and keep the fragments in perfect apposition, if the patient could keep from flexing the leg during both waking and sleeping hours. For fear some one may think I am claiming too much originality in this matter, I will say that to some extent it was foreshadowed by Dr. Edward Borck, of St. Louis, at the last meeting of the Tri-States Medical Society, in that city, in remarks published in the St. Louis *Medical and Surgical Journal*, for January, 1882, upon " Fractures of the Radius ; Treatment by Rubber Bandage." These remarks I heard, and Dr. Hamilton himself strikes the key-note of the treatment when he says, in " Fractures and Dislocations," sixth edition, p. 523, "The cotton cloth roller is preferred, especially for the purpose of approximating the fragments, because, if unglazed it yields a little, and adapts itself smoothly to the skin, even sinking down a little just above and below the patella, thus rendering it less liable to slide over. Reversed turns are omitted altogether, because they cause sharp cords where they are folded, and sometimes produce painful constrictions and excoriations." All these reasons apply with more force to the india-rubber bandage. My thanks are due Drs. G. W. Connell and J. B. Shawgo, and Mr. Alexander F. Lee, for their efficient assistance in the treatment of the case.

A CASE OF CHRONIC HYDROCEPHALUS.

BY D. A. HENGST, M.D.,
Of Pittsburg, Pa.

Willie H., aged 11 years, came under my observation in the winter of 1879, with the following history: "Had been a bright and healthy child until the age of two years, when he had an attack of brain fever, lasting about one month, during which time he had several severe convulsions. After this he seemed apparently well until the age of three years, when he had a moderately severe attack of typhoid fever, accompanied by delirium ; this attack lasted about four weeks, after which he was in good health for about one year. When about the age of four years, he began to have tremors of the hands and legs, pain in the feet, stiffening gait, feet became stiff, swollen, and sensibility greatly impaired, and could not bring his hands to his mouth. His intellectual faculties at this time were not impaired, but now his head began to enlarge, face broad and aged-looking, eyes sunken, and forehead protruding ; he would sit with his head between his knees. From now on he gradually grew worse, and at the age of five years had to be in bed constantly, his head enlarging and the body emaciating, his appetite most of the time being good and bowels regular, but he had no control of his bladder, and there was almost a constant dribbling of urine.

At seven years of age he had convulsions for several days, and after that, at longer and shorter intervals, until his death, which occurred about one month ago.

Three years ago, when I first saw him, his head measured twenty-one inches, in its antero-occipital circumference ; body a mere skeleton. with considerable muscular contraction, the forearms being firmly flexed upon the arms, and the feet greatly everted ; these contractions increased so that at the time of his death both hip joints were dislocated downward and forward, into the thyroid foramen.

During the six years that he was constantly

confined to bed he also had annoying and troublesome bed-sores, which, on account of the incontinence of the urine, it was impossible to prevent.

The special senses, with the exception of sight, which was very weak, were not impaired. During the last two years of his life the mental faculties were very weak.

After death, which occurred during a convulsion, the post-mortem examination revealed the following state of affairs: Post-mortem rigidity slightly marked; emaciation extreme; length of body forty-five inches, length of legs twenty-four inches, weight of the entire body about twenty-five pounds; circumference of the head, antero-occipital twenty-three inches, biparietal fourteen inches, from root of the nose to the occipital protuberance fourteen inches. On examination of the head found the scalp thin, and no subcutaneous tissue; average thickness of the skull about one-tenth of an inch; membranes very tough and firmly adherent to the skull, but not at all to the brain substance. The lateral ventricles were enormously distended and found to contain about fifty ounces of a clear, serous fluid. The brain substance formed a sack varying in thickness from an eighth to half an inch, and was pale and anæmic in appearance; the convolutions and sulci being nearly effaced by the pressure of the fluid. At the base of the brain and in front of the pons varolii was found a tumor about the size of a walnut; it seemed to be attached to the crura cerebri and form part of the floor of the lateral ventricles.

This tumor was examined by my friend, Dr. J. M. Stevenson, of this city, and by him pronounced to be a glioma. The question is, was this tumor a subsequent growth, or did it start about the time the child had the alleged attack of brain fever, at the age of two years?

The nervous symptoms manifested before the enlargement of the head would seem to indicate that the tumor was the primary trouble, and the hydrocephalus produced by the interference with the circulation through the lateral ventricles of the brain.

The treatment in a case like this, of course, amounts to nothing; only palliative measures could be used, and that only for acute symptoms as they arose from time to time.

Cases of hydrocephalus are on record which were said to have been cured, but it is doubtful if they were cured. The duration of this case, nine years, is certainly a long time, the average duration being from two to three years, but cases are reported which have continued even longer than this.

A CASE OF RUPTURE OF THE UTERUS.

Reported at the meeting of Burlington County, New Jersey, Medical Society,

BY W. L. MARTIN, M.D.,

Of Rancocas, N. J.

On the morning of the 15th of fifth month last, I was summoned to attend E. F., aged 31, in what was to be her third confinement. Arriving about 9.30, I found labor progressing naturally; pains coming on rapidly; head beginning to engage in superior strait; os nearly dilated. After waiting considerable time, and the case making slow progress, I gave 30 drops of fl. ext. ergot, feeling that labor had sufficiently advanced at this time to make use of this means to stimulate uterine effort. At a suitable time after this ruptured membranes, and awhile after I gave 30 drops more of ergot, when labor set in with much more vigor than heretofore. When all seemed thus to be going on satisfactorily, and was bidding fair to be soon over, as the head was about to engage in soft parts, there came a complete cessation of all pains. The woman lying in this condition so long, excited my fears that something was wrong, which, upon examination, proved to be the case, as there was found to be a large laceration beginning at the os and extending up into the body of the uterus on the right side. This plainly accounted for the complete cessation of uterine contractions, for in this condition it would be impossible to have contractions of the uterus. Feeling now that the child would have to be delivered without any assistance from the mother, I therefore, through a great deal of persuasion (she having a great dread of instruments), applied my forceps and made every effort my strength would allow, without accomplishing much. Finding the instruments were losing their grasp of the head, I removed them, expecting to apply them again better. But with all the persuasion I could command she would not submit to have them applied again. Knowing now that chloroform or ether would have to be given, I directed the husband to send to Moorestown for an assistant, while I, in the meantime, went home, about two miles away, to come again when the assistant arrived.

About 7 P.M. Dr. T. met me and confirmed my diagnosis of the case. I, therefore, asked him to apply his forceps while I etherized the patient. After she was thus completely insensible to pain, Dr. T. applied his instruments and used all his strength for a considerable length of time, when the forceps slipped from the grasp of the head. A second and third time, with the handles of the instrument bound together with a cord, the

same thing occurred. Becoming exhausted with continued effort, he asked me to change positions with him. I did so, and applied my forceps with no better success than before. So throwing the forceps aside, I turned the child and delivered it very easily in this way.* The placenta was removed immediately after. To prevent a hemorrhage we injected a large dose of ergot into arm. Not an alarming amount of hemorrhage occurred. I gave quinia and opium, combined with other appropriate directions for the night, and left at 10 P.M., when pulse was 120 per minute, small and thready.

16th, 7.30 A.M. Pulse 88, with nausea and vomiting, which had been kept up through the night; but I suppose this was partly due to the anæsthetic. No medicine was retained through the night. I gave oxalate of cerium, and applied sinapisms over the region of the stomach, to control nausea, afterwards subnitrate of bismuth, with other minor things, but still vomiting continued, and nothing retained. 5 P.M. Pulse 80; no pain, but tenderness. Still to give pill of quinine and opium if could be retained.

17th, 7 A.M. Pulse 84; no pain; still vomiting. 5 P.M. Pulse 100; considerable pain and somewhat swollen and tympanitic; pill not retained. Injected very near $\frac{2}{3}$ grain of acetate of morphia in arm; ordered turpentine to be applied externally, on piece of flannel, also verat. viride to be given, and the parts to be cleansed with tepid water.

18th, 7.30 A.M. Pulse 72, full and soft; had a good night; no pain, but no difference in swelling of abdomen; gave pill, quinine and opium; continued turpentine, and water injection. 4.15 P.M. Pulse 108; pain came on about two hours ago; vomited again, the first time since last evening; injected $\frac{1}{3}$ grain of morphia; continued turpentine, pills and verat. viride.

19th, A.M. Pulse 108; began to vomit again at 5 A.M.; was vomiting when I entered the room; bowels moved some little; had a restless night, especially the latter part of it; same treatment continued, with injection of morphia. 7 P.M. Pulse 104; did not vomit after my visit in the morning until 1 P.M.; continued to vomit during the afternoon; injected morphia; gave calomel with soda; applied blister to abdomen.

20th, A.M. Pulse 100; full; vomiting since 1 o'clock, but as soon as blister drew, nausea and vomiting ceased entirely; bowels were moved freely with calomel; sent for Doctor to meet me; we met at 9 o'clock. He suggested carbolic acid being added to vaginal injection, and the patient to assume the upright position in bed for a few minutes, to favor lochia; other treatment continued as heretofore. 7 P.M. Pulse 96; retains nourishment this evening; same treatment continued.

21st, A.M. Pulse 96; had a good night; breast beginning to enlarge; tympanites about the same. 6.30 P.M. Pulse 104; takes nourishment, eggs, etc.; breast very full.

This ends my notes in the case; but I would state, she gradually continued to convalesce, on from this time, and in about six weeks was out, and now, as I see her, when passing along the road by her premises, attending to her household duties as heretofore, she seems in vigorous health.

I have spoken somewhat in detail in reference to the management of this case in the beginning and from day to-day, believing that such cases can be more clearly presented to view in this way than in any other.

* There were no signs of life in the child.

PROCIDENTIA, WITH RIGIDITY OF THE OS, AS A CAUSE OF DEATH IN LABOR.

BY A. SHIMONER, M.D.,
Of Horicon, Wis.

On the 17th of January last I was called by Dr. Halleck, of Juneau, to assist him in a difficult case of confinement.

Upon my arrival the doctor gave me the following history of the case:—

The lady is about thirty-four years of age; primipara; has enjoyed fair health before pregnancy; was married two years ago. I first saw her on the 27th of September last, on account of inability to micturate, complaining of much pain in the abdomen, and unable to keep the erect posture. Upon examination I discovered an enlargement of the abdomen. Proceeding to draw off her urine, I, to my great surprise, felt a large tumor between her thighs, which, upon closer inspection, proved to be the pregnant uterus prolapsed. It protruded about six inches, was about two inches across the os, and about five inches at the fundus. With little difficulty I replaced it, in about ten minutes, after which she got up and passed considerable water, without any difficulty, and felt well till the uterus again prolapsed. From that time up to her labor I replaced the womb five times; at one time it prolapsed down to the knees, carrying down the vagina and bladder. I tried to keep her in bed, but she would get up, in spite of all I would say; would do her housework, running up and down a flight of stairs.

She was taken with abdominal pains on the

10th of January; the pains were not characteristic of uterine contractions. Upon examination, the os was closed, the neck and os were very large and hard; in this condition she remained up to the 15th, during which time she took very little nourishment. The next morning, at three P.M., the os was dilated to about the size of a silver five-cent piece, when she was taken with severe vomiting.

When I arrived, the next afternoon, I found the lady lying on her right side; she was unable to turn on her back, on account of abdominal pain; was very much exhausted, vomiting every minute; pulse was feeble and respiration was accelerated; abdomen was very tender: the child could not be felt through the abdominal walls; the fœtal heart and placental souffle could not be heard; the diameters, both external and internal, of the pelvis were normal; the uterus was low down; the vaginal portion was large and hard; the os could be felt in the centre of the hard lump, and was dilated to about the size of a silver quarter dollar; the head presented, and was at the superior strait. The uterine pains were few and insignificant, but she had a continuous abdominal pain and great tenderness. We gave her an anodyne and stimulants per mouth, but they were rejected. We watched her closely till next morning, but could not perceive any change in the os. Her condition became very critical; exhaustion increased, pulse became more feeble, respiration was more difficult, and vomiting kept on. Seeing that her only hope of recovery was the termination of labor, we came to the conclusion of so doing; but the question arose, what form of operation is here admissible, as the uterine ligaments were totally relaxed, the os too small and very rigid. Thinking that if the size of the fœtal head was diminished sufficiently to enter the os, and with the aid of the anæsthetic it would dilate by gradually drawing it through, I proceeded to perforate the head with Braun's perforator; this I did easily, but then arose the difficulty in applying the cranioclast (Braun's), but after a considerable work I managed to apply it well; when I commenced traction the head elongated, entered the os partly, and was there arrested; the uterus began to descend and had to be held back; the os would not dilate a particle; on account of the softness of the dead child's cranium the bones gave away, and I had to apply the instrument the second time. Seeing the great rigidity of the os, I made two incisions with scissors, which grated like cartilage or scirrhus, and was as tough as leather; even this procedure did no good, and I resorted to a number more, but without avail, as the cranioclast tore the parietal bone, and became loosened. I next tried to produce version, but could not introduce my hand through the os; after enlarging the incisions, which were five or six in number, I managed to grasp the foot, but turning was impossible. Finally, after working hard for about one and a half hours, I succeeded in getting a good hold of the remains of the skull with the cranioclast, made two more incisions, and delivered the child. The placenta was delivered without any trouble, and hemorrhage was slight. The uterus contracted only partially. We immediately washed out the cavity of the uterus with a weak solution of carbolic acid. We gave her stimulants per mouth and hypodermically, but her pulse would not become any stronger, being, as it was before the operation, very feeble and frequent. She regained her consciousness, after the effects of the anæsthetic passed off. But about one hour after the operation she began to sink; pulse became weak, at times imperceptible, extremities cold, and in that condition she expired in a short time.

The afternoon I arrived, I ordered hot baths, but as there was nothing in the house in which it could be given, it was neglected, and I doubt the efficacy of any form of treatment, with exception of incisions, in a case like this. I cannot recall to my mind another similar case, not even similar in disagreeableness, out of about 3000 cases, while at the lying-in department of Prague, Austria. It is fortunate that such confinements are rare.

Hospital Reports.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINIC OF WM. GOODELL, M.D.,
Professor of Clinical Gynæcology in the University of Pennsylvania.

Reported by WM. H. MORRISON, M.D.

LARGE OVARIAN CYST; DYSMENORRHŒA FROM ANTEFLEXION OF THE WOMB; DILATATION; PROLAPSE OF THE OVARY; HYSTERICAL ATTACKS; TREATMENT OF HYSTERIA.

GENTLEMEN: As this is my last lecture, and I shall not have an opportunity of bringing before you the patient on whom I operated for ovarian tumor last Saturday, I have brought the cyst, and shall say a few words in regard to her condition.

You will remember that on last Wednesday I showed her to you, and I told you that from her appearance I judged that the tumor would weigh somewhere from 90 to 100 pounds, and that I estimated her weight at 80 pounds. I was very nearly correct. The cyst weighed 16 pounds,

and the fluid inside of the cyst weighed 96 pounds, making a total of 112 pounds. The woman, after the operation, weighed 72 pounds. The operation began at 1.15 P.M., and was over at 2.25 P.M. That evening the temperature ran up to 100.4°. The next day it was over 100°, but since then it has not been up to 100°. It has gone up in the evening to 99.8° and down in the morning to 98.6°. Last evening the temperature did not rise to 99.8° but staid at 98.6°. This morning it is 98.4°. She has a good appetite. I feel a strong conviction that she is going to get well.

The treatment was absolute diet for thirty-six hours. As the tumor had reduced her weight to 72 pounds, I did not wait for forty-eight hours to elapse before administering food. I began with milk; at first a teaspoonful, then a dessert-spoonful, then a tablespoonful, and then half a cupful of milk with bread. To-day she is taking eggs, toasted bread and milk.

The diagnosis that I made last week was correct. There was a large mother cyst with a number of small child cysts. Here is the cyst with many of the child cysts still unopened. That is the largest tumor I have ever seen.

I have thought the question over very carefully, whether or not I did right in operating. The operation turned out all right; but that is not the point. Trying to decide what was the best thing to do in this case kept me from having a good night's rest. I think it would have been wiser for me to have aspirated, waited until the cyst began to refill and then have performed the operation. These are my reasons: The extent of the surface of peritoneum exposed was something astonishing; and as you all know, the peritoneum is very vulnerable. Then there were enormous blood vessels which, I think, would have been reduced in size by aspiration. The only really good argument to my mind against aspirating was the one which I mentioned to you; that is, I was afraid that the cyst would refill with a highly albuminous fluid, at the rate of two pounds a day, which would have reduced her very rapidly. I have seen smaller cysts fill up at the rate of over a pound per day.

This is my first experience with enormous tumors. I have weighed them at 66¼ lbs., and in one case we estimated the weight at 70 lbs. Although this tumor was so large, it caused no pain whatever. This is characteristic of ovarian tumors. It simply annoyed her by its weight. She was able to have her bowels moved without much trouble, and had a pretty fine appetite. When she sat down on a chair, she was tolerably comfortable. She has been unable to lie on her back for several months. I did not dare to give ether while she was on her back. I think that she would have died, if I had attempted to do so. I operated with her on her left side, and reached over and made the incision. The abdominal adhesions were pretty firm, but there were no other adhesions, and the stalk was not very large. I consider this by no means a difficult operation. I have frequently had smaller tumors which gave me much more trouble. After the operation, I could almost have wrapped the folds of skin around her body. Her girth previous to the operation was 61¼ inches. The skin is very elastic, and has contracted a great deal. still there is a large cavity.

I presume that I shall get union by the first intention, as I almost always do in these cases. I am a firm believer in the antiseptic dressing. When I used to close up these wounds with wire, without the antiseptic dressing, the wires were always tarnished and black; but when I used wire and the antiseptic dressing, they were just as bright at the time of removal as when they were inserted. That is, to me, a strong argument in favor of the antiseptic dressing. I now use silk instead of wire, but I never have any pus. When a drainage tube is used, we get a little pus at the lower stitches which come near the drainage tube.

Dysmenorrhœa from Anteflexion of the Womb; Dilatation.

The first patient whom I shall bring before you is a woman who has, at her monthlies, suffered the tortures of the damned. She has a very perplexing condition of the cervix. She has a sickle-shaped cervix projecting into the vagina, the vaginal portion of the cervix being the one most bent. Theoretically, there is no doubt that the cutting or bloody operation, as it is termed, is the best one for the relief of this condition. In this operation the posterior wall of the cervix is slit down; a knife is then passed into the womb, cutting the angle which is higher up. This is an operation which I dislike to perform. "The burnt child dreads the fire." As I have told you on a previous occasion, I got badly burnt in performing this operation, having lost a most estimable lady by it. It is an operation with risk, and I never like to perform it unless I feel a firm conviction that it is necessary.

I have the woman under ether, and shall now examine her. I have come prepared to do the cutting operation, but I may simply dilate the cervical canal. Dilatation has been employed in this case a year ago, but it was done without ether, and under such circumstances it must be always imperfectly done. I remove this ring pessary, which I did not put in; she had it when she came to my office last week. She has a retroversion of an anteflexed womb; an anteflexed womb retroverted. What is the meaning of that? Gentlemen of the third year will all understand it. The womb is bent on itself and has not straightened itself, but has bodily fallen over backward, still keeping the anteflexed condition. A retroversion of the anteflexed womb, which means that there is prolapse of the anteflexed womb.

I shall now introduce the sound and see if I can get past the bend. I pass it by what I call the "master's turn," what the French call, applying the phrase to the passage of the catheter, the "*tour de maître*." I pass the sound as far as it will go with the curve posterior, then rotate my hand and depress the handle, and the sound passes into the cavity. The womb measures three inches. This makes me think that forcible dilatation may be successful.

I shall now proceed to dilate. This can be done without the use of the speculum, but it is safer to see what you are doing. This lady is very anxious to have children. She has to work

hard, but at her monthlies she has to go to bed and use morphia by hypodermic injection. I can recommend this operation of dilatation to you with great confidence. As I have said to you on previous occasions, this is rough in appearance, but I cannot recollect any serious inflammation result from it. Occasionally I have had some inflammation, but in these cases it resulted from imprudence on the part of the patient. In doing this operation I use two dilators. The smaller (Eillenger's) is sure to pave the way for the larger and stronger one (Wilson's). The operation can be done with one, but two are better.

Sometimes, in a badly anteflexed womb, you cannot get the dilator beyond the internal os. I worked away for a long time before I hit upon a plan for overcoming this difficulty. The way to do it is this: Take a surgeon's probe, make a sharp turn at the end, so as to pass the bend, then pass that into the womb until the end reaches the fundus. The straight part of the probe now occupies the neck of the womb, compelling it to become straight. You can now introduce the dilator by the side of the probe and then remove the probe. I remember sweating for an hour and a half over a case up town, trying to get this instrument in, and then I only succeeded by using the probe. I now pass the dilator as far as it will go and dilate to a certain point. I remove it and insert it a little further, and so work my way into the cavity of the womb. Having passed the internal os I substitute the larger instrument. It goes in without difficulty.

I cannot promise you that you are going to cure every case, but I can promise you that you will cure the majority, and those who are not cured will be greatly improved. The history is this: you perform the operation, and the woman, at her next monthly, has a great deal of pain and disturbance, for the womb has been bruised, some of the fibres have been torn, and we get, I believe, a fissure, which does not heal at once. It is well to tell the woman that at her first monthly she may have a great deal of trouble, but at the second period she will be surprised at the absence of pain. For a number of months she may go on with ease, and during that time she may become pregnant. That will cure her trouble. After several months have passed she may begin again to have dysmenorrhœa, but I do not recollect a case in which it was as bad as before the operation. I have in some cases been obliged to dilate more than once.

What are the dangers of this operation? If the dilator does not have a shoulder to prevent it from going more than two and a half inches, it may impinge on the fundus and you tear a hole in the womb. I feel satisfied that on two occasions I have torn the womb at the internal os, because, while screwing the handles together, something suddenly gave way, and I had not the slightest difficulty in bringing the handles together. Each of these cases was a great success. Of course, I kept everything to myself, but I watched those cases very closely. I think that while I tore the womb at the internal os, I did not tear the peritoneum, which is elastic, and this prevented any communication with the peritoneal cavity.

My rule is to take away the ether after having dilated the canal and allow the instrument to remain until the woman begins to move and squirm, showing that she feels it. Just before I begin to dilate I slip into the rectum a suppository containing gr. j. of the aqueous extract of opium. The operation requires from fifteen to twenty minutes. The opium will then be commencing to act. I tell the nurse, if the woman suffers much, to use a second suppository at the end of an hour, or better, if she can postpone it that long, at the end of two hours. This is usually the limit to the suppositories. I rarely get along with one. I keep the patient in bed until the soreness leaves her. This evening, as she gets rid of the effects of the opium, she will complain of soreness in the abdomen, and also, perhaps, in the back. If the soreness increases, and the abdomen becomes tender, I lay a poultice over the abdomen, and increase the number of the suppositories, making the number depend upon the amount of pain. The rule is to make her as comfortable as possible, for I firmly believe that opium is one of the best antiphlogistics, especially in pelvic surgery, and that by keeping pain under, we keep inflammation under. If she has a nurse I advise carbolized injections twice daily. I do so for the following reason: As the patient is lying in bed, there will be a little oozing of blood, which will collect in the vagina, form clots, and may become offensive. I never like to have anything offensive in the neighborhood of a newly formed wound; but in this operation there is not much danger of absorption, for in twenty-four hours the little lacerations will granulate, and granulating surfaces absorb only to a limited extent, consequently there is little danger of the absorption of blood, for this does not decompose until at least twenty-four hours have passed. I have occasionally, in an old womb that has been treated by nitrate of silver, made a slight tear of the external os. In performing this operation on one of my patients, a lady in every sense of the word, I made a considerable tear on the right side. She lived at some distance from the city, so I told her that when she went home she should say to her physician, that "I requested you to tell him that I had torn the os in dilating." I was afraid that he might think that she had had a child. If I should examine a woman, who alleged herself to be a virgin, and found such a tear, I should say that she had given birth to a child.

That reminds me of the case of an Irish girl, on whom I operated some three years ago, and removed a large fibroid tumor. It was very large, weighing over a pound. It was so large that I had to divide the perineum on each side to deliver the tumor, but in spite of all, the perineum was torn down almost to the sphincter. I had to put stitches in the perineum and on both sides of it. When she went home there was such a buzz among the old ladies, and from them it extended to the young ones, in her class of life, that I was compelled to write a certificate of her virginity, before these would believe that she had not given birth to a child. There was every evidence that she had never borne a child. Indeed, if she had borne a child, I should probably have been able to deliver the tumor with only a slight laceration.

Prolapse of the Ovary; Hysterical Attacks; Treatment of Hysteria.

The next patient has been lately admitted. She was sent to me with a note from a lady who is eminent for her kindness to the poor, with the request that I should admit her. She is 29 years old; she is pale and anæmic. She has had four children. Her health began to fail after the second labor, which occurred eight years ago. She is regular at her monthly periods. They sometimes last for a day, then stop, and again come on for half a day. She has not lost too much since her marriage, but before that she lost a good deal. She has severe spells, which are so bad that her friends think she will not live through them. These are accompanied by a feeling of suffocation, pain in her heart, pain in her womb and an inability to lie in bed. She has to work very hard, and she tells me that she has a good deal on her mind. The symptoms thus far are those of a neurosis.

I shall now try to find out what is the matter and what can be done for her relief. I find behind the womb a little body, and pressing on this I give the woman great pain. There are some fragments of fæces in the rectum, but when I press backward on this body it slips from under my finger, giving her a great deal of pain. I think, then, that we have a prolapsed ovary, to begin with; further examination confirms me in that belief. There is a slight laceration of the cervix, but that does not cause the trouble of which she complains.

I shall now pass the sound. For the comfort of one or two gentlemen who could not introduce the sound in the ward class the other day, I will tell them that I cannot get this into the womb. The pain that she now complains of is purely nervous, for I am not hurting her at all, as I have not gotten past the internal os. I have now passed it in. The womb is in a good position. It measures 2.5 inches. There is a slight erosion. (The patient was now removed.)

This is a case that nineteen out of twenty physicians would say was suffering from disease of the womb. They would treat her for this erosion. She would go from one to another, and they would make various applications to the womb, but she would get no better. That is not the kind of treatment she needs at present, although that will do some good. The trouble with this woman is that she is below par, her nervous system is exhausted. She says that she has a great deal of trouble. I do not know what it is. Her husband may be intemperate. Her husband may be unfaithful to her. She is in a state of high nerve tension, pale and anæmic. She made a great fuss when I knew that I was not hurting her, but I did hurt her when I pressed on the prolapsed ovary. Why is it prolapsed? It is prolapsed on account of her general condition. All the organs suffer, but the ovaries and the womb, the reproductive apparatus, which is the most exacting during menstrual life, suffer the most. The spinal cord also sympathizes, and we have irregular distribution of blood, congestion and anæmia. In other words, as I sometimes illustrate it, we may have blushings and blanchings, as we have on the surface of the body, occurring in the womb. I am afraid, I become pale; I am ashamed, I grow red. What are these? They are produced by emotion. They are due to mental action on the nerves, and then the action of the nerves on the blood vessels. So it is in this condition. These blushings and blanchings are not on the surface but in the internal organs. That womb is blanching, and again it is blushing. The same thing is occurring in that spinal column, in that heart. This is a mere illustration, but when you ask me what is the disease, what is its pathology, what it really is, I will be hanged if I can tell you. The woman in this nervous condition has no control of herself. Her nerves are not in a state of equilibrium. They are in a state of uncontrol. They are no longer acting harmoniously. One side of the brain is acting more than the other. One set of nerves is acting differently from the others. They are not pulling together, and the result is that we get these conditions, of spasms in which her friends think she is going to die. If her friends did not think so she would get over them more quickly. The symptoms are alarming. You will be called to a woman in spasms, and in nine cases out of ten they will be hysterical; but you must not make a mistake. They may be epileptic convulsions, or due to uræmia. There is one symptom which I think that you will not find in other forms of spasms, *i. e.*, tremulousness of the eyelids. The eyelids will be closed but they will be tremulous. When you have this symptom you can safely consider the spasm due to hysteria. I know of no other way of distinguishing hysteria by a glance except the general appearance of the patient, and this can only be learned by experience.

What is the best thing to do in a hysterical convulsion? The best thing to do is to give her a shock, mental or physical. If you are plucky enough to throw a bucket of water over her, she will recover very quickly, but you will probably be shown to the door by the irate father and mother. A good method of producing a shock is to place a piece of ice over the ovarian region or at the nape of the neck. The girl gasps and at once the state of fixity is removed. If you would administer two teaspoonfuls of Hoffman's anodyne, or a drachm of the milk of assafœtida put in the bowel, would probably relieve the condition; but you wish something that will act a little more promptly. My advice is to get down an emetic, if you can. I do not think it possible for any woman to be hysterical when suffering from nausea. If the throat is so rigid that she cannot swallow, give the emetic by the bowel. If you let a woman see that you are not scared worth a cent, she is going to get over her spell very quickly. If she can have the whole house anxious about her, it is nuts for her to crack; and if she can frighten the doctor, it is the biggest nut of all. If you are the old and tried physician of the family, you might remark, so that the woman can hear you, "If she don't get better soon, I shall have to heat that poker red hot and put it on her spine; that spine is in a very bad condition." I venture to say that there is not one woman in twenty who will not begin to get better. I do not advise you to do it, however. It would be like throwing a bucket of water over her. The father would, probably, invite you to the door.

Make a powerful impression. If an emetic fails, use Hoffman's anodyne. This is really a good remedy. It is a diffusible stimulant, more powerful than valerian, with which it is sometimes combined. As I say, give an emetic, if you can, for a woman must be very plucky if she can go through the nausea produced by an emetic and keep up her hysteria.

Editorial Department.

Periscope.

Extirpation of the Eye.

The Paris correspondent of the *Lancet* thus writes to that Journal:—

Extirpation of the eye is at all times a very serious operation, but it is considered by some ophthalmologists to be positively dangerous in the acute stage of panophthalmitis, particularly when it is complicated with phlegmonous inflammation of the orbit. Manhardt, Knapp, Von Graefe, have recorded some fatal cases after the operation, resulting from cerebral phlebitis, but Dr. Panas, Clinical Professor of Ophthalmology at the Hôtel Dieu, is of opinion that the accidents attributed to the operation are more frequently the result of the malady itself than of the operation. He has performed extirpation several times, for phlegmonous inflammation of the eyeball or of the orbit, and he has had but one death, which, however, was accounted for by a lesion discovered in the orbital bones at the autopsy. Dr. Panas lately performed the operation at the Hôtel Dieu on a young man aged twenty-eight, who was suffering from phlegmonous inflammation of the left orbit in its acute stage, the result of a severe blow with the fist on the eye. The operation was performed under most unfavorable circumstances, as the eye was in full process of suppuration, but it was crowned with success, as the man was able to leave the hospital in three weeks afterwards, quite cured. The following is the mode of operation performed by Dr. Panas for extirpation of the eyeball. After having separated the lids with the dilating forceps he transpierces the ball of the eye behind the ciliary body and the crystalline lens, with a curved needle threaded. This enables him to have a hold on the eye; then, with a pair of curved blunt-pointed scissors, he separates the conjunctiva from the cornea, and cuts through the muscles at their insertion, without even raising them with a hook. Then pulling the eye forward with the thread he cuts through the oblique muscles at their insertion, and the optic nerve at the point of entrance through the sclerotic. In this way he removes the eye perfectly intact, and the operation is certainly more rapidly performed than by the other methods. Dr. Panas considers it also less dangerous, for out of twenty-eight cases in which he had performed the operation in one year, he had never had occasion to record a single accident. His dressing is very simple. He inserts a small bit of soft linen, dipped in almond oil, between the lids, to prevent them sticking together, and then covers the whole with cotton-wool supported by a bandage, and without the intervention of the antiseptic treatment during or after the operation. Indeed, Dr. Panas, who is a great surgeon, uses the antiseptic method on general principle, and does not occupy himself about the rules laid down by Lister and his followers. I once asked an eminent French surgeon what he thought of Listerism. He said there was one good thing in it. It makes surgeons more careful with their dressings, but that the virtues ascribed to the system were as mythical as the creatures it was intended to destroy.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——"Effects of Alcohol on the Brain," a paper intended for popular instruction, read by J. B. Sullivan before the Stanton Excelsior Club.

——We have received, with the compliments of Dr. Reeves, a copy of the Act amending the Code of West Virginia, concerning the Public Health. It is very exhaustive and thoroughly covers the ground.

——Mr. George S. Davis, the publisher, announces that he will have ready, within two months, the translation of Dr. L. Lewin's great work on "Drugs." This translation has been made at the request of the author and under his supervision.

——"Compensating Conditions in the Causation of Sickness," by Milton Chase, M.D., of Otsego. This is a reprint, from the Annual Report of the Michigan State Board of Health for 1881, of a paper read at a Sanitary Convention at Battle Creek, March 29th, 1881.

BOOK NOTICES.

Transactions of the Medical Society of Pennsylvania, at its thirty-second annual session, held at Lancaster May 1881. Published by the Society.

Every physician in the State ought to have this volume on his book shelf; he ought, indeed, to make it a point each year to procure a copy of the proceedings, since their accumulated contents will furnish him at any time a history of the profession of his State.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

SPECIAL HOSPITALS FOR INFECTIOUS DISEASES.

Since we have realized the fact that scarlet fever, diphtheria, measles and like diseases are equally as infectious and contagious as smallpox, and since we know that the after effects of these diseases are in many cases infinitely more serious; so then do we have the same arguments for the establishment of special hospitals for these diseases that we have in the case of the more loathsome disease. Our only reason for setting apart a special building for smallpox patients, and compelling such to go there, is because we realize that isolation is one of the most important means of preventing the spread of the disease and checking its ravages. Since we know that isolation is equally potent to check the spread of all contagious or infectious diseases, there should be no hesitancy in preparing suitable buildings and enacting laws to guide the isolation of all patients affected with any infectious disease. There is one fact we must stare in the face. So long as contagious diseases, in the persons of their victims, are allowed to mingle with their fellows, so long will they be communicated from one to another, and so long will they continue to afflict and devastate the people of the world. There is but one way in which we can hope to stifle the wonderful vitality of these disease germs. We must remove them and the body in which they reside to some secluded spot, where they will not find new material upon which to inflict their pestilential presence, when their vitality will utimately become exhausted.

It would, no doubt, seem like a hardship to some, were they to be compelled to send those near and dear to them to a public hospital, when taken with scarlet fever, diphtheria, etc. But we must ever remember that one of the greatest foundations of social prosperity and advancement is the principle of the greatest good of the greatest number. This isolation will redound to the material advantage of the greatest number, therefore, it should not be objected to by the few, who may become so afflicted. Again, remember the golden rule, "Do unto others, etc." We would all like to have *other* cases of contagious diseases sent to the hospital, but would prefer to have an exception in our own cases. This principle is erroneous and selfish. It is a very important duty that physicians owe to society, to instruct those to whom their advice is potent, about the necessity of isolation, and to advise that every case be so isolated. The question of special hospitals was brought before the New York State Medical Society at its last meeting, by Dr. Jacobi, and the matter is now being agitated in New York. Several prominent philanthropists of that city have the matter in hand, and it promises soon to assume a tangible shape. In addition to the isolation, there is another important point to be considered. By erecting good buildings, in healthy locations, with their sanitary arrangements perfect, the majority of the patients would actually be surrounded by better hygienic influences than they would be at home; which would naturally tend to reduce the rate of mortality. Private rooms, handsomely furnished, with all home comforts, could be provided for those able to pay; while to the poorer classes, nice, clean,

well ventilated and lighted wards, with good medical attendance, and kind and careful nursing, would constitute a better home, and supply much more favorable conditions for recovery than the majority of them could command in their own houses. This is a matter of the greatest moment, and its careful and attentive consideration is recommended to physicians and public-spirited citizens everywhere.

News and Miscellany.

Medical Society of the State of Pennsylvania.

THIRTY-THIRD ANNUAL SESSION.

(*Continued from page* 532).

On the Nature and Treatment of Rodent Ulcers.

The object of Dr. Hearn's paper was to call the attention of general practitioners to the early recognition and treatment of this disease. The term, he claims, is a misnomer. The ulceration is secondary to the primary cancerous deposit. The deposit *always takes place in the skin*, generally engrafting itself upon a mole, wart, or some injury or abrasion. It differs from epithelioma, which may commence in the skin, also in the tissues beneath the skin. It differs from ordinary ulcers in that it is progressive and never heals. It differs from syphilitic ulcers in that it is single and never multiple. Although usually a senile disease it may occur in younger persons.

The ulcer is generally painless, unless it involves nerves, and is the tardiest of all forms of cancer in destroying life; sometimes lasting twenty or more years. The lymphatics of the neighborhood are never involved. Its usual location is on the face, although it may occur on the hands, vagina, or elsewhere.

The appearance of the ulcer, in rodent cancer, is that of a sore, with hard, ragged edges, and a somewhat solid base. Rodent cancer is not necessarily a malignant disease, the term cancer being an anatomical, while malignant is a clinical distinction. Properly treated in the early stage it may be radically cured. The usual exemption from glandular enlargement constitutes the fundamental distinction between rodent and malignant disease.

The *treatment* of this disease in the early stage is the complete destruction of the ulcer, even a little beyond its edges, using caustic or the knife. Caustics have failed often, because the edges and the base as well have never been entirely destroyed. This is why opprobrium has been cast upon the "caustic plan" of treatment.

Many patients will not submit to the use of the knife in the early stage of the disease, hence caustics can be as effectively used, especially if the ulcer be no larger than a silver half dollar. Those of a larger size call for the use of both knife and caustic.

The Doctor preferred the use of caustic potash, in the local treatment of the smaller ulcers, although other caustics may be equally efficacious. In using the escharotics, the entire surface, *i. e.*, base and edges, must be thoroughly cauterized. With the larger varieties, especially those involving the orbit, after the use of the knife the opening is to be packed with paste of chloride of zinc. This has for its object the destruction of any remaining cells which might have been missed in using the knife.

Another caustic to which the Doctor was especially anxious to call the attention of the profession was ethylate of sodium, which he thinks possesses to a much greater degree than other caustics the power it has of destroying diseased cells, and leaving healthy ones unharmed. It is more particularly adapted to superficial ulcers, especially in those cases where they occur on the nose or forehead, in which, on account of deformity, he dislikes to use a stronger caustic. He paints the affected parts freely, knowing that in a few days a slough will occur and leave the parts beneath entirely healed.

Dr. Alfred T. Livingstone, of Philadelphia, presented a paper embodying some

Suggestions Relating to Some Modifications of the Pennsylvania State Lunacy Laws.

Some of the principal points made were the necessity for greater care in the preparation of statements regarding the condition of insane patients, and the making of affidavits in cases of insanity; the importance of physicians granting certificates examining the patient independently. Further, the advisability of appointing a special official for the inspection of private and public insane asylums, and the advantage of the home treatment of the insane.

When the Society reconvened on Thursday, at 2 P.M., Dr. John L. Atlee, of Lancaster, Chairman of the Nominating Committee, made the following report of officers for the ensuing year:

President, Dr. Wm. Varian, of Titusville. First Vice President, Dr. A. Hewson, of Philadelphia. Second Vice President, Dr. E. P. Allen, of Athens. Third Vice President, Dr. Alvin Thayer, of Erie. Fourth Vice President, Dr. A. M. Miller, of Bird-in-hand. Permanent Secretary, Dr. Wm. B. Atkinson, Philadelphia. Recording Secretary, Dr. Edward Jackson, West Chester. Corresponding Secretary, Dr. John G. Lee, Philadelphia. Treasurer, Dr. Benjamin Lee, Philadelphia. Committee of Publication, Drs. Wm. B Atkinson, Benjamin Lee and Charles S. Turnbull, of Philadelphia, and Edward Jackson, of West Chester. Dr. J. J. Sibbett, Chairman Committee on Medical Legislation, submitted a report in reference to the act of the Legislature providing for the registration of all practitioners of medicine and surgery. He said that after addressing county medical societies and prothonotaries in counties where there are no societies, responses were received from 46 out of 67 counties in the State. From these it appeared that out of a total of some 2200 registered, 674 were graduates of the University of Pennsylvania and 1020 from the Jefferson Medical College, while 619 were not graduates of any college. In Philadelphia, out of 1554 registered 220 are homœopaths, and 210 from institutions outside of the University of Pennsylvania and the Jefferson Medical College; 48 are registered who

are stated to be without any regular medical education. The Committee report that the enforcement of the registration act is the first duty of the profession, and a committee should be appointed in each county medical society to supervise the work.

Dr. A. L. Kennedy stated that cinchona could be successfully cultivated within the United States, and said that the new Commissioner of Agriculture was in favor of the enterprise, and that the Society should encourage him.

At 2.30 P.M. the Address in Hygiene was delivered by Dr. W. F. Muhlenberg, of Reading, who chose for his subject "Micro-germs;" the address is so well worthy of publication in full that we reserve it for a future issue, since it is too long for our limited space.

A paper was read by Dr. Wm. S. Little, entitled

Subjective Traumatism of the Eye;

Its Importance when the Question of Sympathetic Irritation or Sympathetic Ophthalmia Arises.

Traumatism of the body is strictly objective. Conditions arise in organs or parts of the body which impair their action and function as seriously as by foreign bodies; this is subjective traumatism. The eye presents for observation and treatment, then, two forms of traumatism.

Objective traumatism of the eye is due to injuries by foreign bodies and effects in the eye by general disease, by which vision is impaired, lost, or the organ destroyed, with or without sympathetic ophthalmia. Subjective traumatism is due to the condition in the eye resulting from the strain occasioned by optical defects, impairment of vision resulting from, or inflammatory action and diseased condition produced by, strain on the cornea of the eye. Objective traumatism is chronologically of first importance, as ophthalmic surgery has longer been studied than ophthalmic medicine and the correction of optical defects.

Statistics of ophthalmic work afford the following: 17.7 per cent. is operative; 4.5 per cent. of these for enucleation of the eye, for some of the many forms of objective traumatism; this is from the report of the Dublin Institution for Healing Diseases of the Eye. Subjective traumatism has a larger field.

Dr. Risley's (of Philadelphia) statistics give only 12.28 per cent. of eyes that are emmetropic; myopic 19.33 per cent.; hypermetropic 66.84 per cent. These statistics are much higher than those of Lorenz and Derby, of New York, and Erbmann, of St. Petersburg.

The abuse of the muscular vascular tunic of the eye in obtaining vision among persons with ametropic eyes, leads to subjective traumatism and serious results to vision and the tunic of the eye ensue, as serious as occur in the small field of objective traumatism, which in emmetropic eyes produces only objective traumatism, while objective traumatism occurring in ametropic eyes yields more serious results, and subjecto-objective or objecto-subjective traumatism arises.

The emmetropic eye is structurally healthy, though Dr. Risley states 20 per cent. are unhealthy; yet 80 per cent., according to his statistics, remain healthy and only subject to subjective traumatism. The emmetropic eye is free from disease, and when diseased readily cured, or when injured by foreign bodies is less liable to take on sympathetic irritation or sympathetic ophthalmia of the other eye, it b ing emmetropic also.

The correction of optical defects is essential in diseased eyes or the condition of emmetropia must be known to exist.

If this is so essential in diseased eyes or in therapeutical treatment, it becomes far more important when surgery is applied, as after operation all optical defects should be corrected.

When the question of sympathetic irritation or sympathetic ophthalmia arises, the necessity of finding out whether it is due to the objectively traumatized eye or whether it is due to the optical defect in the eye not injured, is necessary, so as not to enucleate an eye unnecessarily, or if it be enucleated still correct the optical defect in the remaining eye, so as to do away with all forms of traumatism.

Cases are reported in support of all the conditions that are experienced in the paper as occurring in the Eye Department of the Jefferson Medical College Hospital, under the care of Prof. Wm. Thomson, Ophthalmic Surgeon to the Hospital and the writer of the paper, and also those in his private case work.

Dr. Leffmann, of Philadelphia, read a paper on the "Medical Relations of the

Prevailing Food Adulterations.

The paper began with a notice of the inaccuracy of the general newspaper agitation on the subject, and pointed out that the general character of adulteration was not of a nature calculated to actively spread disease. Especial attention was given to glucose and oleomargarine, as important substitutes for common articles of food. It was pointed out that the first of these bodies was so much like common sugar, and the second so much like common butter, that no serious injury could result from the extensive use of either. The impurities present in glucose, although sometimes spoken of with alarm, are really of little importance, and the difference between the chemical composition of butter and oleomargarine consisting merely in the absence from the latter of a few per cent. of butyric acid, such difference cannot be of any consequence in a dietetic point of view. The use of glucose in fermented liquid, as a substitute for malt, was shown to be of absolutely no consequence; for the sugar of malt and other fermenting liquids is substantially the same as that made by the artificial method, and, of course, the alcohol formed from either is identical. Specimens of granulated glucose and of table sugar largely adulterated with it were shown, and a test for the detection of such adulteration was described. This consists in boiling a solution of the sugar with a little sodium carbonate, when a yellow color indicates glucose.

Note was also made of the now frequently published statements as to the use of such bodies as ground talc and other insoluble powders as a means of adulterating flour, butter, candies, etc. Dr. Leffmann stated that, in spite of the frequency of these statements, he never was able to obtain a specimen of food adulterated with such materials, and he doubted the extended use

of them. It was pointed out, however, that some inferior kinds of groceries are made up of sweepings and refuse, and such articles will be marked by a rather high percentage of mineral matter. Of this kind was a sample of cheap ground coffee, which was found to contain about fourteen per cent. ash, while the good article gave only about four per cent. The extensive use of starch and plaster of Paris in candies was stated to have been amply confirmed by analyses, and in reference to the use of poisonous colors, lead chromate (chrome yellow) was the only objectionable substance of at all frequent occurrence. In conclusion, the author of the paper stated emphatically his conviction that at present no necessity existed for specially enlarging the power of the State or National governments in this matter, as the wrong is mostly of a commercial nature, and probably entirely controllable through the ordinary channels of justice and the laws as now existing.

A paper on

Puerperal Malarial Fever

was read by Beriah E. Mossman, M.D., of Greenville.

The attention of medical men who reside in malarial regions has of late years been directed to the subject of the influence of malarial or telluric poison upon the lying-in-woman. The result of careful clinical investigations has been to secure abundant testimony, which goes to prove that during that period the poison will develop itself with such symptoms and conditions as to justify the conclusion that malarial fever is one of the diseases incident to childbed, particularly in localities where malarial diseases prevail. Although the term *puerperal malarial* fever is not included in medical nomenclature, it is, in my opinion, an appropriate one, and as time passes, and the disease is better understood, it will meet with recognition by practitioners and occupy a place in the medical literature of the progressive future.

The views which I express upon the subject in this paper are those arrived at from my own study and observations during an experience of over eighteen years' practice in a highly malarial region, during which time I have treated quite a number of these cases in my own practice, and have had the privilege of seeing others in the practice of cotemporary physicians.

I have been unable to find any literature upon the subject, with the single exception of an excellent paper written by Dr. Barker, and published in the *American Journal of Obstetrics*, April, 1880. The publication of Dr. Barker's paper anticipated me, as I was at that time preparing an article for publication upon the same subject.

It is a disease not infrequently met with, and bears a striking resemblance in its symptoms to other diseases of a more serious nature, incident to the puerperal state, in which local phlegmasia exists. Hence. it is important that it should be recognized by the practitioner as early as possible whenever met with, for upon a correct diagnosis will depend intelligent and successful treatment. The occurrence of chills, followed with high temperature, at such a time, cannot fail to cause alarm and anxiety in the mind of any person around the patient, as the great mortality of puerperal diseases is well known. Hence, if a chill has occurred, followed by high fever, and the case can be promptly pronounced a malarial disease, it will save the friends and all those near and dear to the patient a great deal of anxiety.

After an account of the etiology of the disease, Dr. M. describes the symptoms, clinically. Cases of puerperal malarial fever differ greatly in the severity of symptoms, although every case will have paroxysms of more or less prominence, recurring at moderately regular intervals. These paroxysms will be followed with periods of apyrexia, or if not of complete absence of fever, the temperature will be much lower and a general letting up of all symptoms. The most prominent symptoms, according to Dr. Barker, are "chills, sometimes very slight, often a temperature near two degrees higher than is found in the beginning of any other puerperal disease, a rapid pulse, followed by greater prostration than is usual with other diseases during this period. Then. in these cases, where the disease first manifests itself by such an explosion of striking and alarming symptoms, there is a remarkable remission on the following day, so that the obstetrical attendant flatters himself that the attack is ephemeral, and that his treatment has been most wise and successful; but this delusion is removed, one, two or three days after, by a recurrence of the attack, but generally less severe. But the succession of phenomena first described only appear in typical cases. I am disposed to believe that in a large majority of cases, three or four days before the explosion, the patient finds herself depressed by a general malaise, more or less pain in the head, back and bones; insomnia, thirst and loss of appetite; and when the disease is developed, the chills are less severe, the temperature not so high, the pulse less rapid and the remissions less marked."

My experience has been that some cases commence without any of the prodromes of malarial fever being present to mark the approach of the chill, and the attack may begin very soon after delivery, in a few hours, or during the first day. Again, the chill may be very slight at first, indeed, so slight as to entirely escape the notice of the patient and the nurse, and when this is the case the first warning of the existence of the disease will be a sudden rise in temperature, but at no time reaching the same height as is the case when the chill is severe and prolonged. Diarrhœa, pain in the bowels, offensive or suppressed lochia are conditions that are sometimes present, and secondary hemorrhage is likely to occur in cases where the disease continues any length of time, and will not succumb to treatment. Delirium is a symptom I have seen, but most generally in those cases where there was suppression of the lochia, or it was scant and offensive. In these cases I have observed that the temperature mostly kept high, the pulse fast, during the period when the intermission should occur; at the same time the skin would be moist. It has been a matter of doubt in my mind whether these symptoms just mentioned were not mainly due to poisoning from absorption of septic matter. But there may be suppression of the lochia

in these cases without any delirium or symptoms of blood-poisoning. In most cases of suppression, where it occurs soon after the delivery, it generally returns soon after the disease is cured.

Puerperal malarial fever may follow successive confinements in the same patient, as was the case with one lady whom I attended after her last two confinements. This was exceptionally worthy of notice from the fact that the first time she had the disease the chill commenced in about one hour after labor had been completed, a remarkably early period of development.

The temperature may keep up quite evenly, the pulse beat high for two or three days, but close observation will show periods of slight intermission, and an absence of pain and tenderness in the bones should lead us to the conclusion that the case is malarial. If quinia is given in full doses at such times as the symptoms are least aggravated, or, in other words, at the period of slight intermission, and its administration is followed by moisture of the skin, slowing of the heart's action, and rapid falling of temperature, the case is undoubtedly, other symptoms corroborating, puerperal malarial fever. Although when these conditions exist it is difficult to determine the true nature of the case, I believe that by careful watching and study a correct diagnosis can be made.

The earliest period at which the disease has made its appearance, in my experience, was in the first case I have related in this paper, in about one hour after delivery. This patient lived in a malarial section of the city, and had had an attack of intermittent fever several months before, but at the time of confinement, and during the period of pregnancy, was unusually well and free from any of the symptoms that ordinarily precede the advent of malarial diseases.

I am inclined to believe that most cases will commence at about the sixth or seventh day.

The second case I have given shows that the intermittent attack, after having been brought under submission by appropriate treatment, recurred on the fourteenth day. This is an important fact, and should not be forgotten in the treatment of cases.

The disease may occur at any time during the puerperal state, which includes the period of the first month after delivery, or until the physiological conditions have been restored.

Diagnosis.—The remarkable resemblance that puerperal malarial fever, in many instances, bears to the formidable inflammatory diseases, or those of septic origin, that occur during the first month of parturition will cause the medical attendant some trouble to decide, with any degree of certainty, what disease he has to battle with. In some cases it will be likely impossible to make a diagnosis until the stages have fully developed.

Dr. Barker says, in speaking of differentiation, "That in malarial fever a fall of temperature of three or four degrees is always attended with a corresponding decline of other symptoms, which is not the fact in septicæmia, and the latter is rarely accompanied by pain of the head, back, or limbs. The sensibilities are blunted instead of being morbidly acute.

When the disease first manifests itself, after the sixth or eighth day, I think, however closely the symptoms may resemble septicæmia, the fear of this may, with a considerable degree of certainty, be dismissed."

There is danger, however, that it may be confounded with puerperal fever; but if it is remembered that puerperal fever is a disease that generally begins on or about the second or third day, such a mistake is not likely to happen very often. Further, puerperal fever, after the onset, pursues a steady course, and is not subject to febrile paroxysms, followed by remissions of high temperature, and these recurring at regular periods. There is most always pain, severe and lancinating, confined to the hypogastrium, the bowels soon become swollen, excessively tender to the touch, and the patient lies with the limbs drawn up; in many cases the weight of the bedclothes cannot be borne.

From septic metritis, cellulitis, or phlebitis it can, I believe, be easily distinguished, as the characteristic symptoms of these diseases in connection with the physical condition will reveal the true nature of the disease upon investigation. I am well aware that in some cases of inflammatory diseases the symptoms are so marked, and the local trouble so slight, as to amount to nothing more than tenderness upon pressure over the womb. In cases of doubt, if the attendant is watchful, and the disease be malarial fever, it will, without doubt, sooner or later show its true nature by falling of temperature, decline of the other symptoms, and moisture of the skin.

Treatment.—There is but one known remedy that is universally admitted to be a sure cure or specific for malarial fevers, and that is quinine. It should be given in full doses from the first. It is my practice to give fifteen to twenty grains upon the first indication of a fall of temperature. When the stomach rejects it, as sometimes happens when given in large doses, it will be best to combine it with a little opium, or administer it by enema. It should always be borne in mind that the disease is liable to return after having been checked, and the quinine should be continued for several weeks, in smaller doses. Attention should be paid to all hygienic conditions, and the body sponged daily with alcohol and water.

Intra-nasal Surgery.

Dr. Carl Seiler, of Philadelphia, read a paper on Intra-nasal Surgery. In it he recounted some of the surgical operations lately introduced for the relief of nasal stenosis, which he considers the prime cause of the symptoms of nasal catarrh. The obstructions to breathing through the nose which could be removed by surgical means were divided into two classes, viz., those produced by swelling or enlargement of the mucous membrane and by soft tumors growing from the mucous membrane, and into hard, bony or cartilaginous projections into the nasal cavities. The former class was again divided into permanent and temporary stenosis or obstructions. The Doctor then went on to describe the operations advisable for the removal of these obstructions, and said that he had found that the most satisfactory and at the same time least painful method of removing those swellings which are situated at the anterior portion of the turbinated bones, and which are called anterior hypertrophies, was by

means of the galvano-cautery knife; describing the different steps of the operation. He said that it is of great importance in this operation to have the platinum loop at the proper temperature, for if it is too hot, considerable bleeding will follow the incision, and if too cold the application is very painful. With the galvano-cautery batteries in the market it is impossible to accurately graduate the temperature of the knife, and he showed a battery devised by himself for the purpose, which is so arranged that the zinc plates are suspended above the cups containing the carbons and fluid, and may be immersed to any extent by depressing with the foot a treadle on the outside of the box containing the battery. The amount of surface of the zinc plates exposed to the action of the acid determines the amount of electrical current and consequently the amount of heat in the loop of the knife.

The immediate result of the burn is the formation of an eschar and of a certain amount of acute inflammation which stand in a direct ratio to the extent of the burn, and therefore not too large an incision should be made at any one sitting. The ultimate result of the operation is the formation of bands of cicatricial tissue, which by its contraction as it becomes firm binds down the swellings and thus prevents the stenosis. In the same manner a curved galvano-cautery knife is used to cauterize the hypertrophied adenoid tissue in the vault of the pharynx above the soft palate. These operations, if proper care is exercised, are not at all dangerous or painful, and on that account are preferable to the application of chemical caustics, which, as a rule, give great pain to the patient and are in the end not as effective as the galvano-cautery. The author then went on to describe the methods employed by him for the removal of hypertrophies situated far back in the nasal cavity and of nasal polypi. For these operations he employs a wire snare invented by Dr. Jarvis, of New York, the steel wire loop of which is thrown around the hypertrophy or polypus, and by gradually reducing the size of the loop the tissue engaged by it is snared off. To prevent a return of polypi he advised the cauterization of the stumps with the galvano-cautery knife. This method of operating he found to be attended with very little if any pain and hemorrhage. Localized thickenings which are not infrequently found on the cartilaginous septum in old cases of nasal catarrh, and which produce partial nasal stenosis, may also be removed with the wire snare, but when these localized thickenings have become ossified, or when the obstruction in the nose is due to an exostosis of the bony septum, or to an enlargement of the turbinated bones, or finally to a bony spur from the palatine process, neither the galvano cautery nor the wire snare are of any avail, and the obstructions must be removed by drilling them away. For these operations dental engines have heretofore been used to hold and rapidly revolve the drills and burrs, just as the dentists use them for excavating decayed teeth. Within a short time, however, the author stated that he had substituted for the dental engine a small electric motor, invented by Mr. Griscom, and manufactured by the Electro Dynamic Company, of Philadelphia, to which the hand-piece carrying the drills and burrs is attached, either directly to the spindle of the motor, or by means of a short, flexible shaft. The speed of the drill can be regulated to a nicety by means of the automatic, adjustable battery, which belongs to the motor, from a few hundred to 16,000 revolutions per minute, and its power is equal if not greater than that of the dental engine. When used for operation the apparatus is suspended from the ceiling, which run over pulleys and carry counter weights so as to balance the motor in any position in mid-air, and in front of the patient, and to keep it in any position it may be placed in. This arrangement relieves the hand of all weight, and thus a much more delicate manipulation of the tool is possible than can be obtained with the dental engine, for in the latter instrument the hand has to support the weight of the hand-piece and flexible shaft or arm, and besides a good deal of the motion of the foot working the treadle of the fly-wheel is communicated to the hand, making it unsteady. The tools used are much the same as those employed by the dentist, except that when the bony obstructions are far back in the nasal cavity they should be longer in the shaft.

The operation is performed by riddling the bony obstructions with holes made with a cutting drill, and the substance between the holes is then broken down with a coarse burr, and, finally, the shreds of mucous membrane and spicules of bone are trimmed off with a pair of scissors. Usually but a very moderate amount of inflammation of the mucous membrane in the nose follows the operation, and the wound heals readily in a few days. As a rule, it is found more convenient for the operator to place the patient under the influence of ether, so that the involuntary struggles of the patient do not interfere with the operation; this is, however, not absolutely necessary, as the pain is not near as great as might be expected.

For the relief of the obstruction caused by deviation of the septum a variety of operations have been recommended, but the Doctor stated it as his opinion that the simplest, easiest to perform, and at the same time very satisfactory operation, is the following: With a strong pair of forceps which has inserted into one of its blades a number of knife blades, at right angles to the surface and arranged in the shape of a star, the septum is punched at its greatest curvature, by introducing the blade carrying the knives into the open nostril and the unarmed blade into the closed one, and then compressing the handles. The punch is then removed, and with a pair of forceps having flat blades the septum is forcibly straightened, which becomes possible since the triangular pieces produced by the cut made with the punch lap, and thus the distance from the base to the top of the septum becomes diminished. A wooden or ivory plug is then introduced in the formerly closed nostril, with a view to keep the septum in its new position, and is left there until the parts have sufficiently healed to remain straight without that support. This operation is also not very painful, and can readily be performed without ether.

For the removal of necrosed bone and for treating caries of bone in the nasal cavity, the

lecturer said he knew of no better means than the dental drill and burr attached to the electric motor, for the delicacy of movement of the instrument allows the hand at once to detect when the tool has penetrated the diseased structure and sound bone is reached.

Deep ulcerations of the mucous membrane in the nasal cavity, he finds, do not readily yield to the usual applications of chemical caustics, and, therefore, he treats them either with the galvanocautery knife or the corundum cone mounted on a long shaft and revolving rapidly in the electric engine. When the ulcers are small the charring of the surface with the glowing platinum loop answers every purpose and is not near so painful as the application of solid nitrate of silver. If they are large, however, it seems best to freshen up the surface with the corundum cone, which, when rapidly revolving, enables the operator to remove all diseased tissue without injuring the healthy.

The paper closed with a few remarks on the medicinal after treatment of nasal catarrh, and was illustrated by the exhibition of the various instruments described.

Thursday evening a very handsome reception was given the delegates in the Oil Exchange, which is a very fine building. After the promenade concert dancing commenced at nine o'clock, and was continued until three in the morning.

FRIDAY MAY 12th.

Society convened at 9 o'clock; prayer was offered by the Rev. F. H. Rowley. The Address in Obstetrics, by Dr. R. S. Sutton, was then read by Dr. Daly, of Pittsburg. It was a most interesting paper on Abdominal Surgery, in especial connection with ovariotomy, laparotomy, etc., and described the first operations of McDowell and Washington Atlee, and detailed the operations of Langenbeck, Shrœder, Martin, of Berlin, Nussbaum and others.

Dr. John B. Roberts, of Philadelphia, presented a paper entitled

Excision of Cartilage in Nasal Occlusion, due to Deviated Septum.

When the deviation is not very great, relief can sometimes be afforded by making a crucial or stellate incision in the cartilage, at the point of obstruction, and then pressing the weakened partition away from the side of the nostril. It can be kept in this position by a nasal bougie until the wound has cicatrized, if it tends to assume its original condition.

In very many cases, however, the most satisfactory treatment, because the most radical and expeditious, is to cut out a disk of cartilage at the point where deviation causes obstruction. This is best done by the nasal punch or cutting forceps here exhibited. The opening left between the nostrils is no objection to the procedure, because it does not weaken the support of the nasal cartilage materially, and is not small enough to produce whistling sounds during respiration. It is not visible unless the nasal cavities are examined carefully with light or with a speculum, hence it cannot be objectionable on cosmetic grounds. The fenestrated cutting forceps which I have had made are an improvement on others intended for the purpose, because the mucous membrane on both sides of the septum is more cleanly divided, the disk of cartilage is more likely to be removed by the forceps when they are withdrawn, and the instrument retains its keen edge longer. After an opening in the septum has thus been made, any remaining obstruction can usually be remedied by enlarging the orifice by cutting out additional pieces. When the forceps has been forcibly closed upon the divided part of the cartilaginous or bony septum, it should be rocked from side to side a little, to ensure entire division of the tissues.

There seems to be prevalent a traditional notion that the cartilaginous partition between the nostrils must not be perforated in the efforts to render patulous the occluded nostril. Hence patients with one nostril entirely stopped by deflection of the triangular cartilage are often told that nothing can be done to relieve the nasal voice and other symptoms of throat and nose disease due to the imperfect respiration. Sometimes attempts are made to relieve the trouble by dilating the narrowed orifice, or by paring away a portion of the surface of the cartilage. In the latter method caution is given, at least in some text-books, to avoid perforating the septum. This is a mistake.

Dr. William Varian, of Titusville, presented the following case of

Ovariotomy.

On the 16th of Februarv, 1881, I called at the office of Dr. Charles B. Kibler, in Corry, when I chanced to meet Mrs. G., who, in the opinion of Dr. Kibler, was afflicted with a tumor of the left ovary. At Dr. Kibler's request, I made a hasty examination of the case. I found a firm, hard, inelastic tumor, as large as the womb at the fifth month of pregnancy, occupying the left hypogastrium and dipping deeply into the pelvis. It was smooth, had few perceptible irregularities of the surface, was movable, and free from pain and soreness when handled. Mrs. G. was 39 years of age, and her knowledge of the tumor extends over two years. A vaginal examination showed that the pelvis was well filled with the mass, and the womb, pushed somewhat to the right, was of an abnormal depth. I could detect no fluctuation, and the tumor, when moved, carried the uterus with it. The patient was in good health, well nourished, with an active circulation, and was remarkably free from either systemic or sympathetic disturbance. My examination was far from being a satisfactory one, owing to want of time. Mrs. G. was anxious not to lose a train nearly due, on which account I was obliged to dispense with the removal of a sufficient amount of her heavy winter clothing to enable me to have free access to and perfect command of the abdomen. In spite of this,

felt justified in diagnosing a uterine fibroid, and in advising non-recourse to operative procedure so long as her health remained good.

About eight months later, on the 10th of October, 1881, I again met Mrs. G. at Doctor K's office, when I found that a very marked change had taken place in her condition.

It appears that shortly after my examination in February, Mrs. G. had visited one of the Western States. While there, some time during the month of April, she met with a severe fall. Her feet slipping, she came down in a sitting posture with such violence that for twenty-four hours she was obliged to maintain a recumbent position. A moderate degree of lameness and soreness was the only apparent result of the accident for a period of two or three weeks, at the end of which time she noticed that she was beginning to perceptibly increase in size. This increase had steadily continued up to the time of our meeting, and was accompanied by soreness and discomfort, together with the sympathetic disturbances so common in these cases. She was now as large as a woman at the full time of pregnancy, and showed all the evidences of a rapid failure of the systemic powers.

I found the same firm, hard tumor in the left hypogastrium, apparently unchanged in size, which existed at the time of the previous examination. The rest of the abdomen was occupied by a large tumor, evidently containing several subdivisions, and yielding on palpation sensible, although somewhat indistinct, evidences of fluctuation. The two tumors could be completely separated, so that I was able to pass my hand between them to an extent only limited by my power of indenting the abdominal walls. Moving one growth did not appear to influence the other, unless made to impinge directly upon it. This examination was made under the same unfavorable circumstances as the first, but still I felt satisfied that there were two tumors coexistent in the case. The one probably ovarian and colloid, though possibly an elastic fibroid. The other a fibroid. I now suggested the removal of the ovarian tumor and with it the opposite ovary, expecting by thus producing an artificial menopause to completely control the further growth of the fibroid, and possibly to secure a decided reduction in its size. If I found the removal of the fibroid, with or without the uterus, indicated by the appearances presented after laparotomy, I would remove all the diseased organs.

Circumstances of a personal nature prevented my patient from resorting to an operation until four months had elapsed, when, on February 15th, of this year, I operated at the home of Mrs. G., near Columbus, Warren county, in the presence of the following gentlemen: Drs. Kibler, Elstone and B. H. Phelps, of Corry; Walling, of Columbus; J. T. Waid, of Spartansburgh; Sherwood, of Union; Whitney, of Lottsville, and Blaine, of Pleasantville. The patient at this time was very anæmic and prostrate. Her abdomen was enormously distended by a very large polycyst, easily diagnosed, the upper cyst giving free fluctuation, while the rest of the tumor gave that elastic semi-fluctuation so characteristic of cysts filled with semi-solid colloid material. A solid mass about the size of a pint bowl on the left upper corner was all that could now be traced of the fibroid, but this still retained all the characteristics of the original tumor. Every care had been taken to thoroughly prepare the patient and to render aseptic the room, as well as the patient herself, the surgeons present, the instruments, sponges and operator. As I anticipated a more than usually formidable operation, I had directed that the patient should be brought to a condition of incipient inebriation. By thus producing turgidity of the cerebral vessels I hoped to secure prolonged anæsthesia, with the least risk to my patient, and with a small expenditure of the anæsthetic.

I will not dwell upon the successive steps of the operation, as these vary only in minor details, and are too familiar to all present to be of special interest. Besides, each case furnishes its own laws and guides for its conduct; and my only endeavor is to accomplish the work which lies before me, after the abdominal section is made, with as much rapidity as is consistent with thoroughness, and to meet with prompt decision each emergency that arises, in the manner which at the time appears to be most likely to conduce to the ultimate safety of my patient. When permitted to exercise my preference, I now always drop the pedicle. But I use the clamp and other methods of treatment when they manifest special advantages in a case. So much by way of parenthesis.

I found but one tumor in this abdomen. This was a polycyst, of great size. All the cysts but one were filled with colloid material, which was almost solid in consistency. The exceptional cyst, a large one, contained the thick, dark-colored, viscid fluid so familiar to all ovariotomists, and so characteristic of a large number of ovarian cysts. On the left upper corner of the tumor was the firm, solid mass alluded to, which, when incised, presented all the sensible features of a genuine fibroid. This was an integral portion of the tumor. The pelvis was completely filled with organized fibrinous exudation, enveloping all its contents and rendering the developments of a pedicle to the tumor impossible. After an unsuccessful attempt to enucleate, I ligated the base of the tumor, and removed it. Its weight, with contents, was estimated at 45 lbs.

The patient was under chloroform about fifty minutes.

The after treatment was conducted by Drs. Kibler, of Corry, and Walling, of Columbus, and the skill, energy, and judgment displayed by these gentlemen merit a detailed report from day to day, but this is forbidden by the limits of this paper. A chart of pulse and temperature curves, furnished by Dr. Walling, is herewith submitted, by which we see that the highest range of the thermometer was 101°, which point was reached during the first twenty-four hours. During the second day 100° was the highest temperature attained. After this, 99½° was the greatest temperature, while the greater portion of the time, for many successive days, it did not exceed the normal. The pulse was quick throughout. During the first three days some bloody urine was drawn from the bladder, but this readily yielded

to the exhibition of the salicylate of soda. The patient suffered from urethritis and vaginitis, largely owing to bad nursing. The bowels acted normally, and the condition of the abdomen was all that could be wished, during the entire course of the case. At first the discharge was very free, and aseptic irrigation of the cavity of the abdomen was required several times a day. A sense of heat and soreness in the abdomen, which commenced on the fourth day, was promptly met, and as promptly subdued, by the ice bag, together with the exhibition per orem of quinia and opium. The silver sutures were withdrawn on the ninth day, at which time there was union of the entire wound, except where the drainage tube rested in the lower angle. On the 15th day all discharge had ceased and the drainage tube was removed. At this time the patient, her friends, and her physicians felt assured of a complete recovery. But, alas for human hopes; on the seventeenth day a violent attack of vomiting set in, which for twenty-four hours resisted all treatment, and produced an amount of prostration which in the end proved fatal. In spite of rectal alimentation, and every means which experience and ingenuity could suggest, the patient gradually sank away, and died on the twenty-first day. On the 8th of March I visited Columbus to perform another operation, and on my arrival was met with the sad intelligence of the death of Mrs. G., which occurred the evening of the seventh, just twenty-one days from the date of the operation.

It is due to Drs. Kibler and Walling to state that the patient was too poor to be able to provide herself with a trained and skillful nurse; and that she lay at a farm house, two miles from one of her doctors and six miles from the other. And during her entire confinement, the roads were in such condition, that whether the physician rode, drove, or walked to see his patient, he would be inspired with an ardent wish that he had selected some other method of locomotion. Under these circumstances, are we not justified in saying that neither patient nor doctor had a fair chance?

Although the case briefly reported above has an intrinsic interest of its own, yet I attach to it an added interest, because it appears to throw some light upon the possible reason of the rarity of the occurrence of ovarian fibroids, so far as their existence has been demonstrated by operation. That experienced and skillful ovariotomist, Dr. Wm. Goodell, states, in a clinical lecture recently reported, that the occurrence of fibroid tumors of the ovary is so rare as to have been denied by some writers. But that he had encountered three tumors of this nature, in his personal experience. I have myself removed one ovarian fibroid, and had I operated on this patient, in February, 1881, about the time I first saw her, I see no reason to disbelieve that I should have added one more fibroid to my list. For that this tumor was a fibroid, or at least what we call a fibroid, at that time, I see no reason to doubt. That the injury produced by the accident which occurred in April, or some other cause, had produced degeneration of the tumor, I also believe.

I ask, then: Is it not possible, and even probable, that this is a frequent termination of fibroid tumors of the ovary? And since recourse to operative interference is usually delayed until the patient's health begins to give way, may not this degeneration be the usual termination of this form of tumor? I well remember, in my earlier experience as an ovariotomist, how much I plumed myself on having successfully removed a colloid polycyst, which a year or more before had been pronounced a fibroid by a skillful and experienced ovariotomist.

Another question. Are colloid polycysts benign in their character, or do they possess the elements of malignancy? In other words, are they semi-malignant tumors whose incipient stage is represented by what we call a fibroid?

The hope of obtaining a reply to these questions is my only excuse for occupying your time and attention with a report of so common an occurrence as the removal of an ovarian cyst.

After which a paper on "The Use of Atropia," by Dr. E. Dyer, of Pittsburg, was read by title.

FRIDAY AFTERNOON.

Society convened at two o'clock.

Dr. Frances N. Baker then read a paper on

The Management of the Perineum During Labor.

Since the invitation to prepare a paper to be read before this Society came late, and the necessity for a prompt reply was urgent, I selected my subject somewhat hastily, and more with a view to what is to myself of interest and importance, than with a thought of what would either interest or instruct my audience.

Therefore, if any further apology than this seems needful for occupying the time of the Association with the consideration of so *trite* a theme, I will offer in my defence *the large number of lacerated perineums* that are constantly being found upon the gynæcological table.

I feel certain that either the *methods* which we have adopted for the protection of this important structure have been very defective, or that these same methods have been imperfectly *executed*, else we would not so constantly meet with the undeniable proofs of many disastrous failures.

This subject of "perineal preservation" (or support, as it is frequently termed) is entirely the outgrowth of civilization, for the ruder nations make no attempts whatever in this direction. And it would be a matter of much interest, and some profit, perhaps, could a tabular statement be obtained of the number of lacerations happening among a people who practice no manner or method of preservation, and then compare it with the number of tears occurring in the hands of those practicing the most active interference (even to the extent of unremitting support for ten or twelve consecutive hours).

Another item of not less interest would be a comparison of the *different* methods now in use for the avoidance of lacerations, with the percentage of failures belonging to each. But such information as this will scarcely ever be ascertainable.

Statistics upon perineal lacerations, outside of hospitals, are not very abundant. There seems to be great unwillingness on the part of the profession to acknowledge the occurring of this accident, unless it has happened at the hands of some other practitioner.

Again, in acknowledgments upon the subject a great difference exists in estimating the gravity of the lesion. What one observer estimates as a slight rent, another with higher ideals of professional success regards a tear of considerable moment. Then, too, we have no uniform standard of measurement, and the figures employed do not give a correct idea of the *extent* of the injury. The centimeter of one or the inch of another may mean much or little.

Since perineums are not all of the same dimension, we will arrive at a more accurate understanding of the condition, if we regard the whole perineum as the unit of measure, and then estimate the injury as fractional parts of the whole, rather than the length in inches or centimeters.

And, finally, one of the most vital causes of our incompleteness of information upon the number as well as extent of the injuries occurring to the perineum during labor is the failure of the physician to examine the patient after delivery, in order to ascertain just what the state of the parts may be. I speak advisedly, and of what I do know, when I say that, too often for her future comfort, he goes away without an idea of the mischief done, and she, so long as she has rectal and vesical control, believes that all is well, but finds, after she assumes her wonted duties, that she is *not* so strong as before her accouchement, and concludes that her debility and discomfort arise from the fact that she is an *American* woman, and that she has been unfitted for maternity by having had too much education. But, alas! for this pleasant little fiction, many women seek our private office and the treatment room of the hospital, who have neither college education nor perineums.

But before discussing the *methods* of preserving the perineum, a review of the *causes* that render some form of interference necessary will, perhaps, not be misdirected effort.

(1) In cases when the sacrum is too perpendicular, thus making the propelling force to act more in the direction of the perineum than in that of the outlet of the parturient canal.

(2) Where the pubic arch is too acute in its outline, thus preventing the head from filling the upper part of the arch, in which condition we have the force directed against the perineum with unusual energy. A narrow pubic arch is practically the same as a *long* symphysis pubis, and the head must go further down, in order that it may escape, than it would were the arch broad.

(3) A thickened state of the urethra and the subjacent parts has, curiously enough, been regarded as modifying the labor in the same manner as a narrow pubic arch. It certainly must do it only in a modified degree, if, indeed, it have a *noticeable* effect at all.

(4) Too little inclination of the pelvis, this anatomical peculiarity increases the risks to the soft parts, because of the liability to rapid labor.

(5) An excessive *width* of the perineum, the centre of it, consequently, receiving the force of the presenting part rather than directing it forward.

(6) Too *long* a perineum.

(7) *Rigidity* of the perineal tissues or of the vaginal orifice. The texture of the vaginal tissues, though thinner than the perineal, is at the same time less distensible. The *age* of the patient, too, if she be a primipara, may be calculated upon as predisposing to this rigidity, the condition of inelasticity being most common in aged primiparæ.

(8) If the tissues have been weakened by disease; also the presence of old cicatrices.

(9) Too much voluntary force exerted on the part of the patient.

(10) The use of ergot.

(11) The *sex* of child, too, may be regarded as a factor in calculating the probabilities of a laceration of the perineum; the birth of male children being attended with more danger to the soft parts of the mother, and especially if she be a primipara, because of the greater size of the male head. According to the observations of Clarke, of Dublin, the circumference of the male head exceeds the female by $\frac{5}{8}$ of an inch, and the length of the transverse diameter is $\frac{1}{8}$ of an inch longer. And that, as the order of labor rises in difficulty, the amount of male births rises in number." Then, under this same caption, I may include the commonly quoted cause, viz: "the disproportion between the size of fœtal head and the rima vulvæ," as well as the excessive length of the bis-acromial diameter, for the *head* may escape without producing a laceration, and the shoulder or elbow *produce* or *extend* one already commenced. Indeed, I think the shoulders, from their irregularity of contour, may, with propriety, be regarded as more formidable opponents to the integrity of the perineal tissues than the head itself. They have, however, the advantage of a previously dilated canal.

(12) Mal-presentation, as in face, when the mento-occipital diameter is made to extend the vulvar orifice at least $1\frac{3}{4}$ cm. more than in vertex presentations of anterior varieties.

(13) Mal-positions, as in posterior varieties of the vertex, where extension of the head occurs backward over the perineum. (Of course I allude to those cases where internal rotation forward has not occurred.)

(14) The awkward use of instruments. Awkward position of the patient, and the same may be added of the accoucheur. And lastly, but perhaps least cogently, is the idea in the mind of the physician (if he be young in practice), that "a certain number of perineums will have to be sacrificed anyhow."

Now, after even a brief consideration of the foregoing causes, some of which are entirely opposite in character, we may with safety conclude that no single line of treatment will be applicable to all cases, but that the "management" must be such as will meet the exigencies of each particular case under supervision.

And as the first pre-requisite of successful "preservation," I would consider a thorough knowledge of the anatomy of the female pelvis and its organs as most essential. And side by side with this topographical anatomy I would place a thorough and critical diagnostic examination.

The only safety is in *knowing*, and we can only know by an investigation of each and every case. We ought to know if the perineum be long or short, if there be much or little development of the parts that bound the vulvar orifice. If there be rigidity or relaxation. If tumefaction

or œdema exists. The *size* of the vaginal orifice. The persistence of the hymen. The condition of the vaginal walls, the presence of cicatricial tissues. If the bladder be distended or the rectum full. The condition of the pelvic walls and the dimensions of the pelvis as a whole, with the presentation and position of the fœtus. It seems to me the line of conduct is far plainer after coming into possession of these facts than before. In other words, the future of both patient and doctor is far safer.

And now, after being thus armed with a complete understanding of our case, we will often find that many of the so-called causes of laceration are removable, and that a portion of the remainder can be rendered innoxious.

(1) In this day and generation no perineum should be injured from the use of ergot. So long as the uterus is occupied by the fœtus, placenta, membranes, or even coagula, ergot is strongly counter indicated.

(2) The awkward position of the patient and physician is quite within control. In the second stage of labor the left lateral decubitus for the patient upon the right side of the couch, reckoning from the head of the same, makes her easy of access and places the attendant usually where he has the most ease of motion.

(3) Lacerations resulting from the *awkward* use of instruments are preventable in only one way, but the remedy is applicable to the physician and not to the patient.

(4) Too much voluntary force exerted by the patient is rarely a just excuse for a tear, since an anæsthetic has come to form an unforgetable article of the armamentarium. And while we can thus control voluntary effort with our anæsthetic, we have at the same time a powerful opponent to *rigidity* of tissue. And in this stage of labor I prefer chloroform to ether. I like, of course, to know that the condition of the heart and lungs is good, that no kidney trouble exists, and that there is no great probability of post-partum hemorrhage.

The condition of the rectum and bladder should *always* receive attention, no matter what the statement of the patient. A rectal enema of warm soap suds should be a matter of routine practice, if ever routine practice is admissible. The use of the flexible catheter during the second stage, even if not unduly prolonged, is good practice but not always easy. Of course this kind of management implies the early attention of the physician, and insures to the patient a great deal better service than many of them either appreciate or remunerate. But what shall we do to the *perineum?* Do *not* support it. Manipulations directed to the perineum destroy its integrity, and the best results follow support of the presenting part rather than of the perineum itself. With two fingers in the rectum you can have absolute control of the head after the mouth is accessible, and always should the presenting part be expelled in the *interval* of contractions. In many cases full control of the presenting part can be maintained by pressure upon it with the thumb and index finger, without resort to the rectal touch (which is always offensive to the patient). And at no time during the expulsion should we lose sight of the mechanical relations. If there be too much flexion favor the upward movement of the head toward the symphysis; this can best be accomplished from the rectum. Or if too early extension of the head occurs before relaxation be complete, favor flexion by pressure upon the presenting part backward toward the sacrum. "But if the axis of the fœtal cylinder is cutting the diameter of the vulvar circumference at a right angle then will the cylinder pass through the ring with least damage to its margins, and to push upward or backward would be to spoil the relations," and instead of giving intelligent assistance we would be substituting meddlesome stupidity. But what to do in those cases where a tear is inevitable? Then resort to the bilateral incision of the vulvar orifice. If the continuity of tissue must be destroyed control the locality, and as far as possible the extent, of the tear. These incisions should be made through the lateral margins of the orifice midway between the anterior and posterior commissures, and if the margins of the vaginal orifice form a constricting band over the presenting part, then the incisions should include the vaginal tissue also. Occasionally we need not include the vulvar tissue. A central tear of the perineum may commence as a tear of the vagina, but in the majority of cases the borders of both the vaginal and vulvar orifices need to be included in the tract of the bistoury or scissors whichever you may prefer to use.

The best made objections to these incisions is, that they do not always prevent a central tear, but if they save but fifty per cent. of the otherwise unavoidable central lacerations of the perineum they should not be abandoned. They are not painful if made during a contraction, and union without suture is more probable than in a central tear of the perineum, of the same length, because they can be made out of the reach of the action of the perineal muscles. And in conclusion, although the *title* of my paper does not *include* the treatment of lacerations when they have actually occurred, still I wish to record one more plea, and a positive one, too, in addition to the many already so well made, for the *immediate* repair of the injury. I quite fail to see why the repair is so often postponed. The benefits that accrue to the patient are incalculable; her consent, usually, easy to obtain; in fact, her morale at that time is very often better for the operation than at a subsequent period, while we have, naturally, all the attendant circumstances necessary for union (except the presence of the lochia). Then the sensibilities of the parts are reduced to a minimum, and an anæsthetic not always indispensable. So that we have an operation of comparative ease, which by delay is convertible into one both painful and tedious. So, in view of even these facts, I would *insist* that the *immediate repair* of lacerations of the perineum be regarded as part of the attending physician's *duty*, and the avoidance of it punishable, by at least, a *lower professional standing*.

Then followed a paper on "A Rare Case of Nervous Disease," by Dr. J. L. Stewart, of Erie, which was read by title. Then followed Dr. Levis' paper, by title, of which we give a short abstract.

The paper of Dr. R. J. Levis, on

Surgical Expedients in Emergencies,

presented some original resources in the absence of ordinary means and appliances.

The relief of an over-distended bladder he had effected by doubling a piece of common iron bell wire, and the blunt doubled end passed through the urethral tract, distending it and allowing the urine to pass between the wires.

A common rye straw, with its end wrapped with either thread or yarn, or tipped with sealing wax, or the stem of a common clay tobacco pipe, are efficient substitutes for the female catheter.

Venesection can be made easy and certain, with even a dull and blunt pocket knife, by first transfixing the vein with a fine sewing needle.

A number of ready and ingenious resources are given for the arrest of epistaxis and hemorrhage in general. A good tenaculum is extemporized from a fish hook tied to a pen-holder. A flannel bandage, cut bias, is sufficiently elastic to substitute the Esmarch bandage.

Expedients for ready fracture dressings are given, one of the best of which is the material of common palm leaf fans, split into fragments and bandaged around the limb. For a ready fixed dressing the ordinary sand-paper, softened in warm water, is recommended, the paper, sand and glue giving, when dry, the requisite stiffness and body to the splint.

Postural methods of treating fractures, as those in the vicinity of the joints, are referred to, and that of the clavicle by a brief recumbent position.

To open the mastoid cells in cases of abscess urgently threatening cerebral complication, he has effectively used a carpenter's gimlet.

Rectal injection by a hydrostatic column, with a long tube, is referred to; and also the distention of the lower bowels, in cases of invagination and impaction, by carbonic acid gas and water from the ordinary mineral water bottle, or the syphon attached to a rectal tube.

Stramonium is recommended for ready use in iritis and traumatic injuries of the eye when atropia is absent.

For simple, cheap and effective antiseptics, sulphurous acid, alcohol, whisky, and the salts of iron, copper and zinc, may well substitute carbolic acid.

After which Dr. William S. Roland, of York, read a paper on

Hæmaturia.

This term is of Greek origin, and means bloody urine, or voiding of blood by urine, and like other hemorrhages, it may be active or passive, and may come from the kidneys, ureters, bladder, prostate gland or urethra. There can be no difficulty in detecting blood when found in the urine, but the question of practical import is, to determine from whence does it come? and here, in this connection, I quote from an article by Dr. F. K. Bailey, found in the Philadelphia Medical and Surgical Reporter, Vol. xxvi, page 321, as follows: "Watson says 'Hæmaturia, strictly idiopathic, must be very rare.' Aitken only alluded to it incidentally in connection with albuminuria. Cullen remarks 'that neither he nor any of his friends had ever met with an instance.' Wood says 'It is by no means common, except as an attendant upon inflammation of some portion of the membrane lining the urinary passages, and even under these circumstances, is seldom so considerable, as to claim particular attention.' Eberle gives some excellent diagnostic circumstances which will guide us in giving locality to the origin of the blood voided from the bladder. Dunglison points out also the principal diagnostic marks to aid us in the study of cases which may come under our notice. Barclay, in his work on Diagnosis, specifies many points to enable us to determine the origin of the blood, but says 'These observations all tend to show that hæmaturia is almost constantly a symptom, though a casual one, of disease in some portions of the urinary apparatus.'" I further quote from Sir Henry Thompson's Lectures on Diseases of the Urinary Organs, as follows: "What is the source of it? Now, it is often not an easy thing to state at once what point of that long and complicated organic apparatus which commences in the Malpighian corpuscles, and ends at the external meatus, is the source of the blood in question, for sometimes it is exceedingly difficult to define its source. If the hæmaturia is the result of inflammation, there will be general fever denoting its presence; if produced by slow organic change, there will be history of failing health, and probably urine changed in quality, otherwise than by mere admixture of blood." Von. Ziemssen and other writers tell us that hæmaturia is sometimes the first symptom of renal cancer, that it may sometimes be developed without any preceding pain, and it is often impossible to make much out of this symptom, if it is quite isolated, though a renal hemorrhage arising without any external cause, and running its course without pain, is always to be looked upon with suspicion; another, perhaps more reliable, sign, is the discovery of a tumor, which makes the diagnosis passably clear. Taking the best medical authorities as our guide, we infer that primary cancer of the kidney is considered a rare affection, and when it does occur, is usually confined to one kidney, the right one being most frequently attacked; the kidney may not be necessarily much enlarged, and the disease may run its course without giving any very prominent symptoms on which to base a satisfactory diagnosis; pain in the region of the loins may sometimes be the first symptom, and that may not denote much significance. The most important symptoms to be considered are the renal tumor and the hæmaturia; the latter may be noticed at any early stage of the disease, but it is only the attending physician who has made himself familiar with the experience of others, and who has the opportunity of seeing the patient during the entire course of the disease, noting in time a tumor, and the successive appearance of hæmaturia, and all the other well marked symptoms that are daily brought under his notice, who will be prepared to make a more easy and reasonably correct diagnosis than one who is not familiar with, or who has only a partial knowledge of the case.

The above observations have been suggested by the following case, which came under my special notice and care:—

Dr. T. L. C., a retired physician, aged 74 years,

called on me at my office, in the latter part of March, 1881, and stated that he was troubled with hæmaturia, and in answer to my question, he said "it had troubled him more or less at various times for the preceding eighteen months, and perhaps longer, but the discharge was usually so slight as not to cause him any uneasiness, but lately the flow of blood was increasing, and beginning to alarm him, that he had taken quinine and tr. mur. iron, but the discharge still continued, though he really was not suffering from it, and thought he was gaining flesh. The Doctor, at that time, presented a fine personal appearance, bearing the impress of a well preserved gentleman; habits all good, and, temperate in all things, he looked the picture of perfect health and bodily strength, and he could not remember of ever having met with an injury at any time, nor could he assign any cause for his trouble. I suggested to him, to try fluid ext. of ergot; a few days afterwards he reported that the ergot acted like a charm in arresting the bloody discharges. About two weeks thereafter he again reported that the flow had returned, and was very bad. I then said to him that I thought the trouble was in the bladder, and advised him to continue the ergot and drink flaxseed or elm tea, which again had the effect of much diminishing, or nearly altogether arresting, the discharge. Some time afterwards, about the middle of May, the Doctor reported that the disease had again broken out, and was very much more obstinate and lasting longer than the other spells; that he thought the discharges of blood on some occasions averaged a pint and more a day. He now, for the first time, complained of pain, and a sensation of weight in the lumbar region, also pain and burning at the anterior extremity of the urethra. I desire here to state, that I never, for a day, lost sight of the case, from the time of his first reporting himself to me, but was in daily intercourse and consultation with him, and during all this time, of about seven weeks, he was treated with ergot, hamamelis, gallic acid, matico, acid. sulph., quinine, tr. mur. iron, etc., at such times and doses as the nature of the case seemed to indicate; he was also cupped and blistered over the lumbar region, and while he seemed to derive some benefit from the treatment, the discharge continued with short intervals, more or less, every day, and he was never entirely free from it for perhaps more than one or two days at any time.

On the 25th of May I informed the Doctor that I now had reasons for changing my opinion as to the location of his disease, and that I believed it was located in the right kidney, that it was alarming in its nature, but not necessarily immediately fatal, and suggested a consultation, to which he readily assented, and said we would go to Philadelphia; accordingly on the next day we went to Philadelphia and saw Dr. J. H. Brinton; the Doctor made a thorough and searching examination, but failed to discover any signs of calculi, and said he did not believe there was any stone there. I then said to Dr. Brinton that the trouble, in my opinion, was not in the bladder, but was in the right kidney; he seemed to think, and so expressed himself, that possibly I might be right, and said he had no suggestions to make regarding treatment, other than what I was doing. On the 31st of May I wrote the following in a letter to Dr. Brinton: "Will you confidentially give me your opinion as to the character of our friend's disease; I have partly formed an opinion, but dread to name it. I hope I am wrong, and will most gladly accept any other name; there has at no time been such prominent symptoms as to lead me to think of diagnosing Bright's disease or calculi, but I fear cancer of the right kidney." To which the Doctor, the next day, replied as follows: "I am afraid your diagnosis is correct; our friend is evidently suffering from hæmaturia, and his face has a dreadfully cachectic look; of course we cannot tell the exact nature of his trouble. There are hardly the symptoms of renal calculus, so that we must look further. I fear that he will not improve, and I should doubt any therapeutic agent doing him much good."

During the month of June there was at no time any marked improvement in the condition of the patient; when there was a diminution in the blood discharges, there seemed to be an increase in the pain, and at times very severe, involving the loins, hip, thigh and leg of right side; there was generally obstinate constipation with occasional diarrhœa. On the 27th of May and 22d of June he went to Atlantic City, in hope of being benefited by the change, but in each instance, after a few days' trial, he was obliged to return home, always feeling worse for the trip.

About the middle of July Dr. A. R. Blair, of York, was called into the case, and he agreed with me fully in my diagnosis. The same treatment was continued, but there was no change for the better; the pains were constant and severe, and the desire to pass urine was frequent and painful; sometimes the flow would suddenly stop, and after numerous hot water applications over the bladder, large clots of blood would be forced out, and then, to afford relief to his sufferings, large doses of opium were freely administered. Œdema in the right limb now set in, and there was also evidently a tumor in the region of the right kidney, which had been previously noticed. On the 27th of August the right thigh and leg measured in circumference two and one-half inches more than those of the left side, and on the 30th the dimensions had increased to four and one half inches, and he now complained, in addition to his other painful afflictions, of an agonizing pain, locating it about the last lumbar vertebra, over which, after tr. iodine and other local applications, there was applied a compress, wet with a solution of atropia, and covered with oil silk, which he thought afforded some temporary relief. From this time on to about the middle of September, the blood discharges diminished, the pains were not so severe, and the œdema was getting less; his rest was not so often disturbed, and the anodyne doses were reduced; but he would take very little nourishment, and was all the time bed-fast, so that we did not feel much encouraged in hope of any permanent improvement. On the 20th of September the volcano again broke forth in great fury. The limbs of the lower extremity, left side, now commenced to fill, and soon were as full as the right ones had been; the discharges of blood were large and frequent, difficult and painful, the pains in the

back and along the course of the ureters and running down both limbs were alarmingly increased. The quinine was continued and stimulants at regular intervals were allowed. Opium was freely administered. This plan of treatment seemed now to afford the only relief for his intense sufferings. During part of intervening period up to October 21st he seemed at times to suffer less pain, the œdema was less, being about the same in both limbs, which had been kept down with bandages. From this time on there was no appetite, memory tardy, mind occasionally for a short time wandering, and when asked what he was talking about said they were only dreams; he was nervous and weak.

October 22d. Is getting weaker all the time, but rests quietly, except when obliged to micturate, which is now very frequent and painful; the desire coming on almost every half-hour; when not under the influence of the opiates, he is not disposed to talk, but readily answers all questions, when roused up; pulse running high and respiration is being interfered with; tumor in right side increasing, and discharges chiefly blood. Authorities tell us "In malignant renal tumor, blood may be found in large quantity at times; the rapidity of growth, and the size attained, are marked characteristics of the disease."

From the 23d to the 28th of October there was a continuation and aggravation of all the symptoms, until he was relieved of his sufferings, by death, which occcurred on the 28th, at 11 A. M. The following is the analysis of the urine, examined June 23d, 1881:—

Physical and chemical characters.—Color and appearance smoky; odor normal; reaction. slightly acid; sp. gravity, 1.023; albumen; nitric acid and heat tests, separately and combined, give about ¼ albumen; ring tests give albumen. Sugar, none detected; deposit; after standing 12 hours, there is a dark red deposit, not very abundant.

Microscopical appearance.—Crystals, none.

Anatomical elements.—Field full of red globules; very abundant; also some white globules.

Casts.—No casts found in 3 slides examined; epithelial cells from bladder, ureter and kidney.

Examined August 19th, 1881.

Appearance smoky; reaction acid; sp. gravity 1.018; albumen test gives about 1-5 bulk; sugar none; deposit red, after standing over night.

Microscopic appearance.—A few phosphates and oxalates; blood; some red corpuscles, large number of white or pus corpuscles; casts none; epithelial cells rather abundant.

During the entire course of the disease, continuing about seven months from the date when I was first consulted, the patient, at all times, except when suffering pain, was calm and resigned; and as to his condition, he did not at any time speak of, complain, or refer to the nature of his affliction.

There, unfortunately, was no autopsy, and hence the true character of the disease must remain obscure forever; nevertheless, my diagnosis shall remain unchanged.

Dr. Henry H. Smith, of Philadelphia, offered the following resolutions:—

Resolved, That this Society *re-affirms* its adherence to the code of ethics as adopted by the American Medical Association.

Resolved, That the delegates of this Society to the meeting of the American Medical Association in 1882, be instructed to enter an early protest against the admission to the Association of the *delegates* of any State or other Society that objects to and does not observe said code of ethics in all its branches. This resolution was seconded by Dr. John L. Atlee, of Lancaster, who said he would have gone to California to second the resolution of Dr. Smith.

Similar resolutions unanimously passed by the Philadelphia County Medical Society were read, as referred to the State Medical Society. Drs. E. P. Allen, Bradford Co., H. H. Smith, A. Hewson, Philadelphia, Jackson, of West Chester, Varian, of Titusville, and others, spoke concerning Dr. Smith's resolution, which was unanimously adopted.

The Society then finally adjourned, loud in their expressions of praise of the hospitality of the profession and citizens of Titusville. The delegates were all entertained with the most sumptuous hospitality in private families, while general receptions were given by Drs. Varian and Moody (who were untiring in their efforts to entertain), by the Mayor of Titusville and many others. The Society meets next year at Norristown.

Annual Meeting of the Sanitary Council of the Mississippi Valley.

The annual meeting of this Council was held in Cairo, Illinois, April 19th and 20th, 1882. The president, Dr. J. J. Speed, of Louisville, Ky., was in the chair, and Dr. John H. Rauch, of the Illinois Board of Health, acted as Secretary.

The New Orleans Medical and Surgical Association was admitted a member of the Association, and Dr. L. F. Salomon took his seat as its accredited representative. It was decided that after this year the fee of membership should be five dollars per year from all organizations belonging to the Council. The committee on river inspection by the National Board of Health reported as follows:—

Mr. President and Gentlemen:—The committee to whom was referred resolutions adopted by the State Board of Health, resolutions adopted by the Michigan Board of Health, executive correspondence relative to Mississippi quarantine stations; presented by Dr. Salomon, of New Orleans, resolutions presented by Dr. G. B. Thornton, of Memphis, and a communication from the National Board of Health, relative to river inspection service, respectfully return above mentioned papers, and recommend the adoption of preambles and resolutions as follows:

WHEREAS, The prevention of the introduction of yellow fever into the United States is a subject of national importance, and

WHEREAS, We believe that there is no safety if an infected vessel is allowed to enter the Mississippi river;

Resolved, That in the opinion of this council it is proper for the Louisiana Board of Health to ask, and it is the duty of the National Board of

Health to continue to give, aid in the prevention of the introduction of yellow fever into the Mississippi valley ;

Resolved, That it is the duty of the National Board of Health to aid in the prevention of the introduction of yellow fever and to give accurate information to all States interested in the sanitary condition of the Mississippi valley.

1. An inspector of the National Board of Health should be placed at Eadsport, to act conjointly with the officer of the State Board of Health in securing the exclusion of infected vessels from the Mississippi river, and in notifying such vessels that they must be thoroughly disinfected. (2) That a representative of the National Board of Health shall be stationed at the Mississippi river quarantine stations. (3) That it is the duty of all health authorities in the Gulf States, promptly to communicate to the National Board of Health any and all possible information relative to the occurrence of yellow fever, or of a case which may be suspected to be yellow fever, and in every possible way to aid the National Board of Health to perform its duty in giving accurate information for the guidance of State and other Boards of Health throughout this country.

Resolved, That this Council, duly appreciating the utility of an efficient inspection service during the summer months, for the Mississippi river, and for railroads having their terminus on the Gulf coast, and also the efficiency and moral effect of such service as was maintained by the National Board of Health during the past three summers, do now respectfully request the National Board of Health to reëstablish that inspection service in the Mississippi river for the approaching summer—that is to say, until the middle of October.

Resolved, That the National Board of Health be requested to place on duty at New Orleans, and such other southern ports as may be deemed necessary, an inspector or inspectors, whose duties shall be to supervise the shipment, by river or rail, of all goods, merchandise, baggage, etc., and to inspect persons when necessary, and to advise by telegram, the secretary of each Board of Health interested in the matter, whenever such goods or persons are believed to be infected, or in anywise dangerous to the public health.

Resolved, That the secretary of this Council be instructed to transmit to the Secretary of the National Board of Health a list of the health organizations forming this Council.

WHEREAS, Measures for the prevention of the introduction of disease from foreign countries into the United States are of national importance, affecting not only the seaboard and Gulf states, but also the interior, as evidenced a few years ago by the widespread disaster from yellow fever, and recently by the widespread diffusion of smallpox, and,

WHEREAS, Hitherto the efforts of State and local health organizations have proved inadequate in giving needed protection ;

Resolved, That in the judgment of this Council such measures shall be taken by the government as will most effectually prevent the introduction of contagious and infectious diseases into the United States.

Resolved, That the work of the National Board of Health and its objects meet the cordial approval of this Council, and this Council respectfully and urgently requests the Congress of the United States to make the necessary appropriation to enable the National Board of Health to continue its work.

Committee : HENRY B. BAKER, DAVID P. HADDEN, GUSTAVUS DEVRON.

A special committee was appointed, to which was referred certain papers and resolutions relative to inspecting and quarantining of immigrants, to prevent the introduction and spread of smallpox. This committee submitted a report recommending that immigrant inspection and means for protection against the smallpox for the year 1882 should be commenced May 1st, and that all the State and local sanitary organizations interested should unite, and should coöperate with the National Board of Health in order to accomplish the objects desired.

It was also resolved that this Council deems it important that clothing and baggage on board vessels and cars coming from places infected with smallpox should be disinfected, even though, by reason of vaccination, no person on board such vessels or cars contract the disease.

Upon motion of Dr. R. W. Mitchell, a committee was directed to be appointed, which shall inquire into what effect, if any, the recent inundation of the Mississippi river may have on the general healthfulness of the people of the Mississippi valley, and report at next annual meeting.

Drs. Thornton, Stephens, Solomon and Farquharson were appointed as such committee.

The following officers were then elected for the ensuing year: President, Dr. G. Devron, of New Orleans; Vice President, Dr. D. B. Hillis, of Iowa; Secretary and Treasurer, Dr. J. H. Rauch, of Illinois. The Executive Committee of the Council was requested to call a meeting at an early date next year, if deemed necessary. After an address by the President on "The Necessity of National Control of the Prevention of the Introduction of Yellow Fever and Smallpox into the United States," the Council adjourned.

MARRIAGES.

ELDRIDGE—HOUGH.—May 10th, in Elizabeth, N. J., by the Rev. L. P. Hornberger, of Philadelphia, Mr. John D. Eldridge, and Miss Ella L., daughter of Dr. T. L. Hough, all of Elizabeth, N. J.

NEVILLE—BROWN.—Wednesday evening, March 22d, 1882, at Chambers Presbyterian Church, by Rev. J. M. P. Otts, W. H. H. Neville, M.D. and Miss Lida T., daughter of E. D. Brown, all of Philadelphia.

PETTIGREW—HUTCHISON.—At the residence of the bride, May 10th, by the Rev. W. G. Reed, Samuel Pettigrew, M.D., of Du Bois Pa., and Emma Louise Hutchison, of Springdale Pa.

DEATHS.

BROCK.—At Morgantown, West Virginia, April 24th 1882, Hugh W. Brock, M.D., Professor in West Virginia University.

GARRISH.—On Tuesday, April 25th, J. Pool Garrish, Jr., M.D., at his residence, No. 66 West 46th Street, New York.

GILBERT.—At Gettysburg Pa., April 20th, 1882, of consumption, Dr. John E. Gilbert, aged 29 years and 9 months.

HOFFMAN.—At Reading, Pa., on April 30th, Dr. James M. Hoffman.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1317.] PHILADELPHIA, MAY 27, 1882. [Vol. XLVI.—No. 21.

Original Department.

Communications.

A CLINICAL LECTURE ON IDIOCY AND IMBECILITY.

Joint meeting of the Medical Societies of Delaware and Chester Counties,

BY ISAAC N. KERLIN, M.D.,

Medical Superintendent of the Pennsylvania Institution for Feeble-minded Children.

(*Concluded from page* 537).

The literature of microcephalic idiocy is very voluminous; phrenologists and psychologists have made the head measurements and mind capacities of these malformed creatures the ground for wordy strife, from which they have carried away nothing, and have surely left no advantage to the innocent objects of their controversies. It has certainly been demonstrated that the size of the brain is not an essential measure of intellectual ability; a genetous imbecile's brain has weighed 70½ oz. or 10 oz. heavier than Cuvier's; while another weighed 63 oz. 4 drachms, which is heavier than that of Dr. Abercrombie. On the other side, we have the whole ancient Peruvian race, with its wonderful metallurgical, engineering, weaving and agricultural skill, a microcephalous race. Hence, we should not be surprised at the capacity of some of our microcephalic idiots, and the want of it among many of those whose heads are normal, or, indeed, large in size.

Of microcephalic idiots we show you this typical case: according to Topinard, the greatest circumference of a true microcephal is not over 13 inches; 7 inches for microcephals, and from 17 in to 18 in. 10 lines, for semi-microcephals.

"It is to be fairly assumed," Dr. Ireland very properly remarks, "that below 17 inches in circumference, the manifestations of intellectual power would be feeble," and he gives any measurement below it as microcephalic. Indeed, he has measured no Scotch idiots below 18 inches.*

Most of our small-headed children are alert, interested, and active creatures, due probably to the large development of the cerebellar and spinal nervous tracts. They have been likened to apes, and their condition has been attributed, by a certain class of thinkers, to atavism, or the reappearance in low forms of humanity, of our simian ancestry. Gratiolet carefully took this up, in 1860, as a matter of study, and shows, from morphological examinations, that the microcephalic brain is a human brain, developing radically different from that of the ape; he proves that microcephaly precedes birth, and that the general form of the brain and its principal fissures correspond with that of the human infant in the fifth month of intra-uterine development.

It is somewhat common to find a family of microcephales; we have in our population of 350 three representatives of families containing more than the single microcephal. In one of these there have been five microcephalic births. The mother is almost a half-witted woman, with a very long and narrow head, small, but not microcephalic.

The three Ceratti brothers, whose interesting lives are written very fully, are three of seven, of a semi-idiotic parentage. The neighbors did not ascribe the peculiar idiocy of the children to

* Ireland on Idiocy, p. 79.

Providence, as is the common habit, but somewhat more sensibly (!) to the presence of a monkey, which Mr. Ceratti persisted in keeping in the family.

I will call your notice to three cases of *Idio imbecility*, ranking in mental condition, as the name would imply, between idiot and imbecile. Ella A. and Lilian C., present—in their facial appearance, dwarfed bodies, deformed heads, narrow buccal arches, imperfect teeth, etc.—the lowness of their grade. I need only add that their intelligence is rudimental. They are extremely sensitive, shy children, and are susceptible of considerable improvement. They are several removes from the hopelessness of profound idiocy.

I regretfully put Johnnie H. in the same category; a child taken into our care at five years of age; so pretty, perfectly formed, and exact in his movements, that all visitors exclaimed at the cruelty of "having such a child in such an institution;" but his mental outfit was limited and deranged; at home he had been kept tied, for fear he would fall from the window-sills, the boy having absolutely *no knowledge of height;* the cerebral centre ruling this dimension was educated at last, or another acted vicariously; whatever the physiological transposition, height seemed to be a devil which, once admitted to his comprehension, "brought other seven devils with it."

The sweet-faced boy bent his new acquirement to the injury of his playfellows, whom he maliciously pushed from ladders, or from window-sills, or from the top of embankments, with a persistency and devilishness in the act, and yet with an innocency of after manner, that beggars description. The various freaks of this propensity have been protean as the forms of epilepsy itself, and cannot be detailed; a few months ago it was noticed that John had frequent falls; they were instantaneous, like the tricks of a clown, and the composure and immediacy with which he regained his chair, and the willful smile at the nearest, impressed the attendant that this was another of his freaks; but a special and more intelligent watch being kept, of these phenomena, discovers the pallor, the momentary unconsciousness, the staring pupils, the slight spasm of the facial muscles—indications of an epileptic change which has gradually but surely developed through the five years of this boy's life in our institution.

We are helped in our understanding and treatment of Johnnie's case, as in that of Mamie, when regarding these eccentric propensities of idiocy as the irregular manifestations of that *epileptic change* which Nothnagle has described as the precursor of, and underlying, all epileptic states. These three are all genetous idiots, with interesting pre-natal histories. Ella would be produced, in the ethnological classification of idiocy, as having been arrested in her development at the period corresponding with the evolution of the Negro; but her mother insists upon it that the cause of her very peculiar appearance is the persistent and curious attention she gave, while enciente, to Barnum's "What Is It?"

We now pass to the representatives of the lowest grade of imbecility. Of these nine children, it is difficult to select the type of the class, notorious as all imbeciles are, especially of this grade, for their strong individuality.

T. T. aged 12, a genetous microcephalic paralytic imbecile, of low grade. Articulation quite imperfect; senses of sight and hearing good; hand well formed; imitation above the grade in which I now place him; cruel in his disposition, showing discrimination, analysis and candor, when he says "he likes to wear heavy boots—good to kick boys with." He is the better of two similarly malformed and imbecile brothers now living. Two deceased brothers were also microcephalic, resembling, markedly, this case. Nothing more intelligible is furnished by our correspondent, as to causation, than that "these three brothers were all born so."

Willie and Edith represent a special group found in all institutions, and which, in the ethnologic classification referred to, has been termed "Mongolian," sometimes "Kalmuck." The outer canthus is usually directed upward, the hair is sparse on the forehead, the occiput is flattened, the ears often incomplete, the tongue rugose, from hypertrophy of the papillæ. Dr. Wilbur has stated that about 6 per centum of the admissions to institutions are cases of this kind; they are found in every State and country; they present striking resemblances to each other, wherever found and from whatever origin. They are all of happy dispositions, often witty and grotesque; rarely live to twenty, and generally die of phthisis. So corresponding are the peculiarities of these children, that you will not fail to notice in another group before you Samuel, whose incomplete ears and rugose tongue will establish the truth of your selection.

These "Mongolians" are all genetous idiots and imbeciles. I have never known any of them to advance to the highest grade of imbeciles, even with the best training and care. They are

usually found a degree only above idiocy, in the lower ranks of imbecility.

Annie O., Johnnie H., Annie J. and Willie G. represent an interesting class of mutes, numbers of whom, with perfect hearing, ready appreciation of language, and often dexterous finger and hand capacity, find their way into this Institution, where, through the special training in articulation, and under the inspiring effect of concert recitation and song, they come to the partial possession of speech; they rarely become perfect in speech; according as the capacity is gradually developed, they are carried forward into the higher ranks of intelligence, and become our most interesting children. The idiocy or imbecility displayed by them is, as often as not, the effect of their isolation; the brighter children of a family outgrow them; they betake themselves to solitary lives and belittling occupations, until the range of their intelligence becomes very limited. They are the Kaspar Hausers of our community. Laura Bridgeman, but for the indomitable faith and effort of Dr. Howe, who recognized her necessities as early as her sixth year, would have sunk into the lower life of an imbecile.

These four are all interesting in their way, but I will take two from the middle grade of imbecility, Georgie and Walter, as illustrating the great advance made by honest work for this class of weak-minded children.

Walter, aged 21. We know little of his antecedents. There was a half aunt, on the father's side, who had convulsions at ten years of age, and who was afterward idiotic. The father was grossly intemperate, abused his wife, and separated from her before the birth of this boy. Scrofula and consumption are hereditary diseases in the father's family. The father died of phthisis, at 43 years of age; the mother of the same, at 35 years. The latter was of good family, but said to be of not strong intelligence. At three years of age Walter had an attack of cerebro-spinal meningitis, in the convalescence from which he was paralyzed in his lower extremities, lost his speech and hearing, and had numerous convulsions. He was admitted to this Institution when 10 years old. It was said of him, by a neighbor, "that he had come to the partial use of his speech, had committed the alphabet, had drawn on his slate, showing some talent for it, and had committed to memory short pieces; but from this he had relapsed, by the unavoidable neglect of his unfortunate mother, and because of his own stubborn tendency to solitude, which led him to the woodshed, where, alone and in silence, he could indulge his liking for whittling innumerable little wagons, of the most persistent pattern. His exercise of speech became thus more and more limited, and his already dull hearing became more dull, from disuse, and partly from an increasing morbid indifference to voices, so that when admitted to this Institution he was believed to be entirely deaf, watching the lips, and reading them to a slight degree, and answering questions only by the repetition of his own name imperfectly spoken.

It was a month before we realized that the boy was imposing on us, in the avoidance of any intellectual attention to sounds; the impediment to hearing, though serious, was made absolute by his lack of volition, to exercise what little remained. An absolute, almost harsh, treatment and course of training was at once commenced, and ere many months he became interested in his own accomplishments, learned rapidly to read and write, and was brought up from the condition of idiocy from deprivation into which he had well nigh settled. He has developed an aptitude for painting, and does much of the neater and precise kinds of wall painting which you may see through the house. His speech is comprehensive of all the business and details that enter into his daily life; his hearing is dull, but he exercises a tremendous volition, and receives more by his ears than he ever could from the most adroit lip reading.

Of middle grades of imbecility I present these as illustrations: Five hydrocephalic imbeciles; two epileptic paralytics; three choreic; two in whom there are evidences of congenital syphilis, and two cases of imbecility uncomplicated by accessory disease. Perhaps among these hydrocephalics there may be a case of hypertrophy of the brain; if there is, we are unable to diagnose it. But, as already referred to, there are cases on record of idiot brains weighing seventy-two ounces. Among these Websterian heads there are no Websters, for the brain, if brain, is of a low organization. In about fifty autopsies which we have made in this Institution we have never discovered a hypertrophied brain. The fluid contents have frequently surprised us; and from what we have hitherto seen, we can imagine that the five cases before you may average one pint each in their ventricles. Perhaps in Willie's the lateral ventricles, corpora striata, etc., are absent, the interior medulla and gray ganglia, dissolved out, as it were, leaving the brain a mere sac; but the gray and white substance are so harmoniously balanced that we have surprising degrees of intellectuality left. Indeed,

these poor fellows stand well among their mates for actual attainments and hopeful possibilities.

The choreics of our family are an interesting, energetic, industrious group, battling courageously with the heavy odds against them. I am surprised that in Dr. Ireland's pathological classification he has not distinguished a class as *choreic idiots*, presenting, as they do, some very marked characteristics.

They resemble one another in their mental and moral natures as closely as the so-called Mongolians resemble each other physically. They are all willing workers, fond of notice, and strongly attached to persons. They are more adherent in their natures, to person and place, than is the case usually with imbeciles. An imbecile, pur sang., finds in the last friend its best friend, and home is a relative consideration only.

Wilson is additionally interesting as presenting the ataxia, mis-shapen skull, dirty skin, and other suggestions of syphilitic taint.

Sarah, from the same middle grade of imbeciles, but not choreic, presents, in addition to the congenital taint of the other, well marked Hutchinson teeth. Syphilis as an element in the production of idiocy is difficult to prove, because of a stolid reticence on this disagreeable subject. It is acknowledged in only about two per centum of the families interrogated by us.

I finish this description of the middle grade imbecile by introducing two lads, in whom there are no complications such as exist in all the others.

H. is the illegitimate progeny of a feeble-minded woman, sired by a vicious, half criminal man, who has always lived in the almshouse of his county, on which he is said to have bestowed some six or eight pauper half-wits during the last twenty years. H. unites in himself some strikingly opposite attributes; he is affectionate, stealthy, cruel, bold, cowardly, industrious, tricky and sensitive. He has been cured of kleptomania several times! he has eloped under a fictitious name, and has been shut up in a Western refuge for many months, returning penitent to us, and eloping again. He prefers now to be fastened nightly to his bedstead, that the impulse of his Arab nature shall not overcome him. His mentality cannot grasp the simplest rudiments of school learning, but he is deft with his hands, and can gracefully handle the oven peel, mould the loaves of bread, and will become, I hope, an accomplished baker. His criminal ancestry might be supposed to outcrop physically in his hang-dog expression when admitted, his short bull-like neck, coarse, staring hair, and heavy movements. You will note the peculiar ears, a veritable "ear mark," by which he was reported to us as being in Pittsburg, under arrest.

We will present, as illustrative of the highest order or grade of imbecile children, eight individuals, some of them growing into adult life.

The unfairness of denominating these by the generic title of *idiocy*, a word that has become obnoxious in all modern language, will be realized at once by every sensitive man present.

The mental deficiency or deviation is often so slight, or the imperfection is found in such a limited range, perhaps involving only the power to form a judgment of values, or a judgment of social proprieties, or a judgment of moral risks, or a judgment of the prevalent wickedness outside of asylums, that it may seem strange that any of these, and especially of the next class we shall present, should be under the care of an institution of this character.

Eugene V. and Ida H. Both of these developed a precocious and apparently healthy infancy; both gave early evidences of highly neurotic conditions, which advanced to the degree of epilepsy in the lad, and which in the girl displayed itself in maniacal passion to bite and injure those about her. In my opinion, the "propensity" of the girl was as much an epilepsy as was the well-defined convulsion of the boy. The propensity of the latter was to rush into a violent passion, terminating in an epileptic explosion; of the other, any excitement of the feelings, whether painful or pleasurable, was followed by pallor of the face, slight twitching of the eyelids, or alæ, and an instantaneous leap toward child, friend, or mother, whom bitten, the paroxysm had passed. The lad passed through the best medical treatment at his home; was thoroughly bromidized, and circumcised; but the disease persisted, and the precocious intelligence of his earlier childhood was rapidly being effaced. The change to an institution, with its methods in eating, sleeping, and balanced occupation of mind and body, was followed by an immediate arrest of the disease, and the interesting fellow is tediously finding his way back through forgotten things, and gaining, I hope, new notions of manliness and self control, that shall preserve him from a sad future.

Ida is not so hopeful, but yet has very greatly improved, and rarely has her "convulsion."

I have not time to more than hint to you that the epilepsy of our imbecile children is often superficial; an attack is easily induced; a threatened attack is as readily repulsed by a strong

psychic impression; as, for example: epileptic children have yielded for years to the prohibition, "never to have a convulsion in 'praise meeting,' 'dance hall,'" or other assembly room, from which, if interdicted, they would lose many good times; on the other hand, a pencil grasped by the fingers of an epileptic child was found to be the factor of his school-room convulsions, displaying how delicate was the reflex irritability, which could not tolerate a certain continuous cramping or tension of the muscles and nerves of the fingers, without general spasm. An alarm of fire produced a convulsion in a nervous boy who had never been known to be so affected; while the promise of a carriage drive, exploded another lad in the same way. The distention of the great intestine by an enema, in a case familiar enough with the remedy not to fear it, was the event of one of the most alarming convulsions I ever saw; the lad was believed to be non-epileptic. The administration of chloroform to a girl whom we were preparing for the removal of a supernumerary toe was attended with a well marked eclampsic or epileptic fit. She had not had a convulsion since her infancy.

Arthur H., Harry S. These are typical cases of idiocy from deprivation, who, under the advantages of educational influences specially adapted to the protean forms of this infirmity, come to the first rank, many to become self supporting, under kindly guidance, but who, left to themselves, sink lower in their enforced isolation. Like Walter, there is in both these a double deafness, first of audition, and secondarily of attention. The degree to which this has gone in Arthur would seem to have placed him outside the relief of even our schools, but beginning as a little fellow, with the hand and speech training of our Kindergarten department, he has slowly learned to read and write; his fingers were early cultivated with the paper plaiting, crocheting and dainty play-work of the desk; grown, he is prepared for the shoe-shop, where, I am assured, he will make a fair mechanic.

Harry comes from a stock somewhat noted for sluggishness of speech in early childhood. His father could not speak intelligibly until seven years of age, and his articulation is still quite imperfect. Others on the father's side were very late in learning to talk. The mother has hereditary scrofula, and is not well balanced. There are four other children, all of whom are as defective, or more so than Harry. Troubled with the phonetics of the village, these children and their parents have constructed a convenient language of their own, which prudently omits the several vowels and consonants which are at all embarrassing, and yet supplies their local needs.

To nip in its bud this "Kingdom of its own," the Directors of the Poor concluded to strike at its vernacular, and removed the head centre, this oldest boy, whose mischievous ability to organize an idiom we are requested to abolish. But I greatly fear that Harry will retain his congenital nervous impairment, whatever that may be, which interferes with the organic utterance of spoken language, that is of the common language outside his own family. A few of his familiar words are—

Cigar as kēkä; Turkey as kertû; Sleigh as clāy; Shafts as clăs; Beads as vēes; Rooster as voofer; Butter as boohoo; Self as cōp; One quart of milk as oo coo bĭz.

Some years ago, a defective lad gave us a somewhat similarly definite vocabulary, which he had enforced upon his family and friends The following are illustrations:—

Bee wee meant little, small or few; Hawdey meant up, out, away; Bobby meant dog; Dindey meant car or cars; Dawday meant Sunday or God's day; Daddy beau meant a nurse; Gongy meant dirty, ugly; Gongy bomey meant dirty, ugly (more emphatic than gongy); Houngy meant home; Hou-day meant this day; My meant I, me, my; Own hoo meant sugar; Pee bay meant bread; Pee pay meant papa; Tee haw meant cold water; Tingting day meant Christmas day; Tondy meant a carriage; Tingy meant a string.

These phenomena of speech show a correspondence with certain nations and races which have given up the use of sounds common in languages of all other nations. The Chinese have no R in theirs; the Mexicans neither B, V nor F; the Iroquois and Mohawks are said to have no labials. A great deal of the inar iculate habit of imbeciles may be attributed to the laziness of imbecility.

This interesting boy, Johnnie McB., with the atrophied right arm and stammering, choreic speech, should demonstrate for us, some day, the localization of his brain lesion.

Mary P., interesting in the annals of surgery, for the successful ligation of the common carotid of the right side, to arrest a fatal hemorrhage, caused by a deep ulceration of the neck following scarlet fever. Her life was saved, but an extraordinarily bright intellect was sacrificed; left hemiplegia was complete, and the intellectuality of the child gradually failed after the operation. The atrophy and paralysis have not increased in the last seven years, owing, I think, to the

persistency with which the poor girl has taken her place in all the calisthenic and dancing exercises of our halls; re-education of the speech centre and a repossession of much of the former intelligence, is the satisfactory conclusion of seven years' residence in this Institution.

Of this class—imbeciles of the third grade—I present also Frank C., one of three brothers, illustrative of a somewhat rare affection—pseudo-muscular hypertrophy. The disease has not been traced back into the ancestry, as is usually the fact; the mother was not strong minded, and was afflicted with epilepsy. There are two daughters of marked physical beauty and of common intelligence.

Time will not permit more than the presentation of six very interesting children, whom I class with the juvenile insane. Two of them, Tom McK. and Annie W., are fully described in a paper on Juvenile Insanity, which was published with the Transactions of the State Medical Society, 1879.

AN EYE PROTECTOR FOR USE WITH THE MONOCULAR MICROSCOPE.

BY L. BREWER HALL, M.D.,

Of Philadelphia.

(Read before the Northern Medical Association, of Philadelphia).

So many physicians use the microscope, or are interested in the care of the eyes of those who do so, that I present this evening a little appliance, designed to be used with the monocular instrument, for the purpose of protecting the unemployed eye.

We are all of us more or less familiar with the loss of vision accompanying squint, and the prevention of it by the use of proper spectacles; but do we recognize the fact that the failure to use is the cause of the loss of sight; and do we appreciate that our employment of one and the same eye at the tube of an optical instrument is the same practice that cost the squinting eye of childhood its power of vision?

So many of us are contented when we have trained one eye so as to be able to do acceptable work, that we think we cannot spare the time to discipline the other. If this process ended upon the withdrawal of the head from the instrument, the practice would be less dangerous, but the trained eye finding an unequal companion, performs reading and all other near work with greater ease than its fellow; sees so much more distinctly that the other is left without exercise, except for large objects, and becomes of less and less value as the process goes on.

I could point to those who have practically lost one eye by this process, and I think I am much below the warrant of fact when I estimate that one-half of all those who have used the monocular microscope any considerable amount during five years are MONOCULAR MEN *for all fine work*. I mean by this that every such person who can "resolve" one of the more difficult "tests" with one eye will find himself unable to do so with the other.

How often have we heard persons exclaim, upon looking into a binocular microscope for the first time, "Oh, how much easier it is to see with this instrument, and how much plainer everything appears," this with one field quite dark (which provokes a smile from an amateur). I am now fully convinced that we cannot ascribe such expressions wholly to dissimulation or flattery, and for the following reasons, viz.:—

When both eyes are left open and one is applied to an instrument, the two images, being unlike, confuse each other in the natural endeavor to blend them. This requires a mental effort to exclude the impression upon the retina of one eye and regard that upon the other only.

Again, when we close one eye by contraction of the orbicular muscle, or by pressure, as by the hand, we cause contraction of the accommodating muscle also, and of the other eye as well.

I have proof of this many times each day, while measuring the eye for spectacles, by means of the ophthalmoscope, but we are all familiar with the spasm in *both* eyes when a particle of dust falls under the lids of *one* only, and we are conscious of the effort, amounting almost to an impossibility before training, of keeping one eye open and the other shut.

Both these are at least factors in the fatigue or irritation that accompanies the use of a monocular instrument, and are strong reasons for employing a binocular one.

There are reasons in favor of a monocular microscope, but we need not stop here to discuss the comparative value of the two forms. It is to overcome these two difficulties and to facilitate the training of both eyes that I propose the use of an eye protector.

A number of these have been devised, among which a plain card, perforated and slipped upon the tube, has, perhaps, been the best; this has to be low down, to be out of the way of the face, and then, to cover the field of vision, becomes so large as to hide the stage, if not interfere with the adjusting screws.

Another consists of a plate extending horizontally from the ocular. In this the edge has to be

cut away to admit the nose, and that necessitates the use of the same ocular and the same eye continuously, or else demands so much time to remove and replace it that most operators think it hardly worth the trouble.

The form that I now propose consists of a small, opaque disk near the eye, supported by a wire extending from its *outer* edge downward, to a point on the tube low enough to be out of the way of the nose, then bent upward, parallel to the tube, but not touching it, and attached to a ring near the top.

I made mine of a piece of brass wire, No. 18, about 45 centimeters long; a loop at one end, 4 centimeters in diameter, covered with a piece of black paper folded over and gummed down, forms the disk. At the other end, I made a ring to fit the draw tube, and then bent the intermediate wire. I attach mine below the flange, on the draw tube, where there is no lacquer to be scratched, but if it should be thought desirable to attach it above the flange, then the ring ought to be covered with chamois, so as not to wear the polish.

The advantages of this form are, the small size of the disk and its support, interfering with the working of the instrument and view of the stage as little as possible. The support is not in the way of the nose; the support is elastic, not uncomfortable when touched by the nose, and striking it does not displace the stand; it can be rotated about the tube and used with either eye alternately; it can be easily adjusted to the eye distance of any worker; and, lastly, it is of so simple a construction that any one can make it for himself, at a very small cost, two or three cents only, in addition to the time.

COLD TREATMENT OF SCARLET FEVER IN A PUERPERAL WOMAN.

BY HIRAM CORSON, M.D.,
Of Conshohocken, Pa.

Mrs. Bridgett Farrell, aged 30, mother of four children, was confined with the last one Monday, November 7th. The eruption appeared moderately on the 9th, and continued to increase until the 14th, when I was sent for to see her, because the physician who attended her in labor had not returned to see her after the first appearance of the eruption. I was confined to bed at the time, and as nothing was said by the messenger in relation to the character of the disease, the young physician who was attending to a few patients for me went to see her. He found her covered with bright eruptions of scarlet fever, with a temperature of 103°, pulse, 130. On inquiry he learned that the doctor who attended her on Monday, the 7th, saw her again on Tuesday, the 8th, and again on Thursday, the 10th, when he found her with an eruption and other symptoms of incipient scarlet fever. After that he came no more, and on the next Monday, the 14th, four days after his last visit, she was first seen by the young physician. He came back and reported the case to me. The child had been taken from the breast.

On hearing his statement, I directed him to return and ascertain whether the former attendant was not still expecting to take care of the case, and if not, to put her under the following treatment:—

But first let me restate her condition: She had been for four days with the eruption of scarlet fever; her head was aching violently; she was extremely restless; pulse 130; temperature 103°, as nearly as could be ascertained, her restlessness and tossing of her arms precluding accuracy in taking the temperature; her throat not very sore, nor much swollen; the muscles of the forearms twitching greatly.

It will be remembered by those who have read what I have written on scarlet fever during the last thirty years, that I have stated that in no case in which the head is much affected in the early stage, is there a very swollen or highly inflamed throat.

In this case I saw that condition was present; an affected brain dominating disease elsewhere. My directions to him, then, were, to go back, taking with him my nephew, from Norristown, who had seen much scarlet fever, and was conversant with my mode of applying cold to the head, and to use the cold in the following way: Never mind that this woman has just been confined; disregard her having scarlet fever; aim to relieve the head, by *pouring* cold water, ice water if need be, upon it; let one draw her head over the side of the bed, and the other *pour* half a gallon of cold water on the forehead, moving the stream from side to side, and on the top, till it is cooled off; even if it requires to be repeated several times; then return her to bed, with directions to have it repeated every fifteen minutes during the time till next morning; also, if the body be very hot, to occasionally sponge the whole body; to use some chloride of potassium for the mouth; give milk as food, and apply cold cloths, ice-water cloths, to the outside of the throat; but this last need not be considered very important; indeed, the one great object of treatment is the relief of the brain.

The next day, Tuesday, found her, early in the morning, worse. The women who were with her during the daytime had followed the direc tions for the pouring on of water and sponging, pretty faithfully, but when evening came, one of them had to go to her own family, and the old woman who was left with her was quite unable to do much in that way through the night, so that he found her on Tuesday morning entirely delirious; knew no one; talked wildly and was extremely restless, with increased twitching of the muscles. The doctors then took her fairly in hand, and the application of the cold was made in the most efficient manner all that day and the next night, and by Wednesday morning she had become quite rational. The treatment was continued, but more moderately, and a large bladder, partly filled with ice and with sufficient water to serve as a water cushion, kept constantly on the head; the body sponged frequently, from head to feet; milk given freely, etc.

It is useless to detail the particulars; suffice it to say, that on one occasion some quinine was used, and after the brain was relieved, the patient continued steadily to improve, until a copious desquamation took place—whole flakes of the surface coming off. I might say, too, that after the brain was relieved, the heat diminished and the pulse lessened in frequency. The young doctor thought it important to put two teaspoonfuls of whisky into every tumblerful of milk. It made me smile to hear him tell it, and I felt that it was to be expected that he would think it important, as it had been drummed into his ears day after day, during three winters, that whisky was the great medicine, without which no person could reach health; all other medicines might be left unused, but whisky never.

I have had a few scarlet fever cases since, but they were of a mild type, requiring only a moderate application of cold to the throat, cold drinks, some laxatives, etc.

But since my last writing to you on this disease and diphtheria, I have seen announcements in our newspapers of the deaths of five children in each of two families, in the upper part of Montgomery county and the town adjoining part of Berks; also deaths of three or four in a family in another county. I know that in these cases the cold treatment was not used, and I therefore feel that I ought to give a wide circulation to the facts, which testify to the value of ice as a remedy in these diseases, so fatal under the old, hot, stimulating, caustic-stuffing treatment. To this end, I intend, as soon as I can find leisure, to publish in pamphlet form various papers which I have written since the year 1840, and which are scattered about in your journal, and other medical journals, and in the State Transactions; to which I shall add my recent experience and the testimony, favorable and unfavorable, written by others, that I can extract from reports of societies, etc. I know, Mr. Editor, that you do not approve this plan. Now, while I respect your judgment, and believe with you, that it may not be the best in a financial view, still, I think it will best serve my purpose, namely, to impress readers with the conviction that it is, of all modes of treatment, the most successful. And as I do not care to make money by it, indeed, expect to lose some, I only ask of you now the privilege, just here, to ask the readers of your journal, who have at any time, during the last forty years, been induced to try it, to please send to me, by mail, at their earliest convenience, their experience with this means of cure, stating distinctly the kind of cases, their mode of application, how long persisted in, etc.

I shall add to my papers on ice treatment some experiences with ice as a remedy, in other affections.

Hospital Reports.

A CLINICAL CONFERENCE IN THE WARDS OF THE PHILADELPHIA HOSPITAL.

BY JOHN M. KEATING, M.D.

Reported by W. A. Edwards, M.D., Assistant Pathologist to the Hospital.

Croupous Pneumonia in Children.

Gentlemen:—It is my purpose to devote several hours each week to the practical portions of a course on children's diseases, in order that you may have the advantages of the treatment of this Hospital, to illustrate, and thereby bring more forcibly to your mind, what I endeavor to portray verbally at our meetings at the University. The first case of an acute character that we notice in this ward is this child, just admitted. I understand from Dr. Fairfield, Resident Physician, that the little patient has been in the house before; a few days ago the mother took it out. The child is two and a half years of age, has always been healthy, and has exhibited no evidence of any of the four diatheses.

Let me call your attention to its appearance as it lies in the mother's lap. You notice that it is restless and uneasy; its breathing is short, quick, and imperfect; expiration seems more pronounced than inspiration, and is not as noiseless; in fact, there seems to be forced expiration, with an expiratory groan, as if, in effect, the child endeavored to make its inspirations more easy by fully exhausting the volume of air contained in the lungs, thus avoiding unusual distention of the lungs by deep inspiration.

You will notice that it lies with its legs extended, hanging down over the mother's lap; the chest is thus made prominent. Such a position shows that the child is suffering from a disease supra-diaphragmatic. The child's intellect seems good, and it seeks, by its piteous glances towards the mother, relief from its suffering. I find there is a history of sudden onset, fever, and a short, dry, evidently painful cough. There has been no previous eruptive disease; no bronchitis attending the attack.

Let us listen to the chest. To do this thoroughly in a child of this age, it is well to have removed all superfluous clothing, poultices, cotton wadding, or the innumerable flannel bands that encircle the children of the poor, and to leave only one layer of material, either the flannel undershirt or its night-gown, between your stethoscope and the chest; be careful that the surface is smooth. Young infants are better placed upon the attendant's shoulder, which will give you the whole surface of their back to examine; a child of this age can lay across the mother's lap. You can thus be sure that the surface is even, and thereby make your comparisons of the sounds of both lungs more accurately. I would advise you, before ausculting the child, to examine the pulse beats and respirations, and I might also have added that it is advisable to take the temperature before the excitement of an examination; if the child is sleeping while you are getting from the attendant a short history of the case, you can readily introduce the bulb of a thermometer into the rectum; otherwise. if the child be awake, I would advise you to let the mother do this for you, and your note of temperature will then be accurate. I would always advise you to take the rectal temperature in an infant less than a year old; it is more accurate and easier obtained.

Let us return to the physical signs: you should accustom yourself to the use of the stethoscope in the examination of children; by it you will obtain more readily the sounds from limited areas, and you will be able to divide the sounds into their component parts, and distinguish the harsh, blowing respiration of consolidation from the breezy, exaggerated breathing of normal puerile respiration. Here you will encounter your first obstacle. The child will not obey you, and breathe at your call; it will not take a long inspiration, slow and deep, as would an adult, and thereby permit you to analyze the sounds, but its breathing will be shallow, rapid, irregular; there will be, as we notice in this case, a groaning, prolonged expiration, with feeble, quick inspiration, giving you scarcely time to catch the sounds before the act is over.

You place your stethoscope at the lower angle of the scapula, on the right side, and after a few respirations you note that occasionally you hear a fine, moist râle—you hear it both on inspiration and expiration; this fine subcrepitus is heard throughout the whole chest on the right side, and if you listen carefully, anticipating the respiratory effort, you can occasionally catch it at that time, and you will note that it possesses all the qualities descriptive of the crepitant râle. Place your stethoscope on its left back, and you will fail to hear such sounds; here you get a louder or more marked inspiratory whiff, and a softer, though equally distinct expiratory sound.

If you have ever listened to a child's chest while it is crying, and noted the exaggerated respiratory sounds that accompany the breathing intervals of its crying spells, you will understand the difference between exaggerated puerile respiration and that which is normal.

Bear in mind, also, that laryngeal obstruction may change the character of sounds of air entering the lung, also of the expiratory murmur; with this we have nothing to do at present.

In the case before us, you have carefully listened over the entire back, and noted the exaggerated respirations, rather harsh, and associated with subcrepitant and occasional crepitant râles on its right side, having as a focus of greatest intensity a spot about two inches square at the lower angle of the scapula.

Now you place your hand firmly upon its back, the fingers remaining at right angles to the child, and note any difference in the vibrations accompanying respiration; you can particularly distinguish a difference during the expiratory groan, and the occasional dry, hacking, suppressed cough. The vibrations are undoubtedly very much more marked on the right chest; this is another pathognomonic sign.

Gently percuss the back, beginning in the supra-spinous fossa of the scapula, first upon one side and then the other, using a firm but gentle tap with the finger accurately placed, alternating on the sides alike; note, as you descend, that the resonance becomes impaired upon the right side; at this point there is a decided higher pitch; note the resiliency is an elastic one, if I may use the term, not the flatness of fluid; still, there is no mistaking it.

You will also notice that the expansion of this lower lobe is not as quick as that of the opposite side, and if you listen once again you will find the voice of the child, during its cry, brought on by our examination, is never readily transmitted to the ear over this point.

We have, then, to sum up, viz. a child, previously healthy, not cachectic, a history of sudden onset, a temperature of 103°, a pulmonary lesion circumscribed, a bronchitis limited to one lung, or a portion of it, and the physical signs showing that the consolidation is compact, is capable of vibrations, and permits the introduction of air at least into the bronchioles, all of which, you know, is found in *croupous pneumonia.*

Your text-books, in order to illustrate the disease diagnostically, will place before you a distinct description of three stages, congestion, consolidation and resolution, but you will soon learn, at the bedside, that though these processes are distinct in themselves, they are associated in the case, they run one into another, by a line of demarcation so faint and illy defined as not to be distinguished except by their grosser signs, and that your stethoscope will soon make evident to you the subcrepitant and crepitant râle and the bronchial breathing, as you pass to its diseased lung. In this case, which is a type of its class in children, you have no *rusty sputa,* so important in the adult case, no well defined crepitant râle, to be brought out by your command, to deepen and show the respiratory act, and no

well defined exaggerated vocal resonance, unless your little patient should become irritable. How shall we distinguish this disease from *catarrhal* pneumonia?

The latter is lobular and scattered, not compact or lobar; it is rarely of sudden onset, following good health; it is accompanied by bronchitis, which is bilateral, and it is usually bilateral itself. It follows diseases which have catarrhal complications, in fact, is usually found in strumous and cachectic infants.

It is more frequent under 5 years of age, and is not so apt to cause the very high temperature of the other affection. But, as I have shown you lately, you may have sudden pulmonary congestion occurring during an attack of bronchitis of frightful intensity, intense bronchial and pulmonary engorgement, with rapid and profuse secretion or œdema into the bronchioles and air cells, in which death from suffocation or drowning can take place within a few hours. You have seen such a case, in which life was only saved by the most energetic treatment, the use of alum and brandy by the mouth, and the alternate immersion into hot and cold water, to stimulate the respiratory function. Such cases I cannot feel justified in attributing to cold alone, but I feel sure they are evidence of some central blood poisoning, either affecting the respiratory centre or causing vasomotor paralysis by its intensity or violence. But let me recall to you one other little patient in the Children's Asylum, whose case we studied together in clinic recently.

The child was four years of age, with no history beyond that of an acute attack of high temperature, with slight, dry, painful cough. A careful study of its chest gave us nothing but dry respiratory sounds, as would accompany the febrile state, and an occasional very fine subcrepitant râle over the left base. The temperature still remained about 102°, running up in the evening to 105°, with no further physical signs, but the cough was slight and painful, and the slightest movement of the body seemed to be productive of pain; upon the second day we noticed that the subcrepitant râle at the base was very fine and close to the ear, and was heard over the entire right base, and to some it became clear that it was a friction sound. Energetic treatment was instituted. Quinine by suppository, liq. ammon. acetatis, as a fever mixture, Dover's powder for the relief of pain, and poultices to the chest, with occasional warm baths and carefully regulated diet.

Gradually the morning temperature became reduced, but the evening exacerbations still remained. At the end of the third day we found the physical signs entirely changed. Now, instead of the pleural friction, we found the respiratory murmur more distinct, especially at the base of the lung; then the dullness on percussion became marked at this point, and gradually ascended; the difference on percussion and palpation became more distinct when the sides were compared, and soon its voice transmission was lost, or the sounds became far away. By comparison we found that the intercostal spaces on the right side were obliterated, and the effusion into the pleural cavity, for such there was, extended upward about three inches. I shall merely recall to your mind here, that we tested the value of non-interference in this case, when we said that the effusion had reached its limit without immediately endangering life, and that instead of using the aspirator to relieve the chest, as we had intended doing, and which should be done at once if you find the case suffering from the encroachment of the effusion, we placed the child upon potassii iodid. and syr. ferri iodid., by the mouth, and continued the quinia by suppository, and rubbed freely tr. iodine to the chest.

You saw the child gradually improve, the area of dullness diminish, and the child, when the parents rashly took it with them to another city, in a fair way toward complete recovery. It may often be of importance to you to remember the points of the differential diagnosis of that condition, and the one we are at present studying; especially should the question of aspiration come up before you as a remedy for immediate relief for impending fatal results.

To-day, we will place Baby A, in the first stage of croupous pneumonia, upon the following treatment. Large, thinly spread mush or flaxseed meal poultices, as hot as the child can bear them (to be tested by the hand), changed every three hours, and covered with oiled silk; as a rule, I prefer them to hot baths in this disease, though hot foot baths, with a tablespoonful of mustard, can be used twice to thrice daily. The bisulphate of quinia, gr. iij twice daily, by suppository to keep down high temperature, with instructions to use one of gr. v should the temperature register 105°.

We will also use whisky or brandy in ʒj doses, to aid the suppository in reducing temperature, if required; the understanding being to keep the temperature below 105°.

Do not forget the great importance of the frequent administration of nourishment, and I would advise you to make out for the mother or attendant, in all cases, a register of *diet* and medicine, to be strictly adhered to, for by it you can readily see what your patient is getting, and the quantity in the aggregate, of food especially, which you can increase or diminish as you see fit.

Should your little patients be fretful and sleepless, you can give two grains of Dover's powder, using the bromide instead of the sulphate of potassium, at night; we will use it in this case. Beware of draughts, especially when changing the poultices, but also see that the room is plentifully supplied with fresh air, well moistened.

Second Stage.—To-day, we again see our little patient. You will remember its condition three days ago. Place your hand upon the back, and you will notice, first, that the breathing is more regular; second, the temperature is reduced; it is now ranging from 100° in the morning to 101°, or slightly higher, in the evening.

The transmission of vocal fremitus is now clearly marked in favor of the right side, and percussion shows us illy defined and doubtful impairment; in fact, consolidation is complete. Your stethoscope gives you many more subcrepitant râles; those on the border of the solidified lung are of a coarser character; there is still harsh and prolonged expiration, and a blowing, roughened inspiratory sound, compared with the oppo-

site side. The mother tells us that the cough is looser, and upon questioning her I find that the stools, which are more frequent, are slimy. In fact, secretion is becoming established and resolution is setting in.

When shall we discontinue the poultices? When mucous râles are heard over the entire consolidated lung, and the temperature shows an abatement of the pulmonary inflammation, then you can replace the poultice by a thick layer of cotton wadding, changing it twice daily, and rubbing the surface of the chest with the following liniment:—

℞. Ol. succini, ℥ ij
Liniment. saponis, ℥ vj. M.

You may use cod-liver oil instead of ordering sweet oil in the liniment; in a few days I would advise the use of an external application of the following:—

℞. Tinct. iodini, ℥ j
Ol. myrrhæ; ol. olivæ, ℥ vj. M.
Sig.—Well rubbed in.

Let us modify somewhat the treatment of this case. You wish now to give tonic doses of quinia mixture in large amount, to reduce temperature, and you desire also to give *iron* in some form. For this purpose, a most valuable tonic is the elix. phos. quinia, ferri et strych., a well known preparation, containing in each ℥ j gr. j phos. quinia, gr. j phos. iron and $\frac{1}{60}$ gr. phos. strychnia; for a child of the age of two years you can give ♏ x three times daily; or you can order—

℞. Quiniæ et ferri citratis, gr. xij
Syr. limonis, f℥ ss
Aquæ, q. s. ad f℥ iij. M.
Sig.—Dessertspoonful three times daily.

Or,

℞. Ferri ammon. citrat.. gr. xij
Syr. amyg. amar., ℥ ss
Aquæ, q. s. ad f℥ iij.
Dose ℥ ij–iv.

and give the quinia still by suppository.

Quinia is a most desirable drug in this stage of the disease, the reason for which is that you should attempt to anticipate any attempt at suppuration or the breaking down of the consolidation and the involvement of the alveoli in the change; really the quinia is more valuable than the iron at this moment, and if one is to be sacrificed it should be the latter. Some children soon get accustomed to the bitter dose, when given with a little syrup and water, and then you will have no difficulty in administering a grain two or three times daily. Liquorice is the most useful excipient, and in a powder, as the following, is at times readily taken:—

℞. Ext. glycyrrhizæ ammonat., gr. j
Quiniæ bisulph., gr. j. M.
Ft. chart. No. j.

The French have used the tannates of quinia. Theoretically it would seem inert, on account of its insolubility; practically it seems to have been followed by sufficient success to have again established a position in children's practice.

The bromo-hydrate of quinia is a preparation I am very partial to, especially when quinia has to be used in large doses; it seems to be equally active, and devoid of the disagreeable head symptoms.

But let us return to the study of the treatment of the case before us.

The child's cough is loose, but still annoying, and a more stimulating expectorant will take the place of our first mixture. We will now give—

℞. Ammon. muriat., gr. viij
Syr. scillæ, ♏ clv
Tinct. opii. camph., ♏ xxiv
Syr. tolut., q. s. ad f℥ ij. M.
Teaspoonful three times a day;

and if the secretion is free, and you think it advisable to act gently on the intestine to carry off the accumulated mucus, you can use—

℞. Liq. pot. citratis, f℥ j
Syr. pruni. virg., f℥ ss
Glycerinæ, q. s. ad f℥ ij. M.
Dose ℥ ij–iv.

Some children seem utterly devoid of sufficient power to relieve themselves of the accumulation of the profuse secretion, the bronchial tubes become clogged with tenacious mucus, the stomach and intestines become coated with it, without power in themselves to cast it off.

Occasionally it will be well to administer a laxative, as a simple mixture of castor oil, aromatic rhubarb and glycerine; or if the secretions have failed to leave the trachea and large tubes, it is well to give an emetic, which you know acts so harmlessly in children.

By the latter means especially will this obstacle be most readily overcome. You know how frequently in this house, we advise the mother, in cases of bronchitis or whooping cough, to frequently change the position of the child for this purpose, placing it on its stomach and partially elevating the body, so that gravity will aid in expelling the collected mucus.

Third Stage.—To-day we again study our little patient: you will notice that we no longer use the poultices; they have been replaced by cotton wadding. You will also notice that the chest over the consolidated lung has been painted with tinct. iodine; in fact, the disease has passed to its third stage, that of resolution.

The râles are now no longer subcrepitant, but are large, mucous, heard everywhere; air is re-entering the portion of lung that was diseased. The percussion note is becoming lower pitched, and there is much less difference between the sides.

The cough is less frequent, is no longer painful, and the amount of secretion, known by inquiry as to the condition of the passages, is lessened.

The temperature is assuming a different phase; in the morning it is normal; toward afternoon, as you at present note, there is a slight rise, a hectic flush. The child is showing the effect of so exhausting a disease, and the slight suppuration, which in the adult would be noted by the yellow sputa, prove that the fibrinous plugs which lately filled the air cells are, in their turn, undergoing softening, and are partially expectorated and partially absorbed.

Now once more begins a critical period of your case. The child may succumb to the weakened condition; it needs supportive treatment—iron in particular, quinine, milk punch or wine whey, cod-liver oil, with the phosphates and the hypophosphites.

If the child had been previously exhausted, or cachectic, or if it should have been the subject of an inherited diathesis, now is the time when such inheritance would claim its mastery. You fear an extension of the suppurative processes a breaking down of the lung tissue, a phthisis, in other words, with the formation of cavities or caseous change.

The child before us was healthy at its birth; it exhibited no signs of inherited or acquired diathesis; it was strong and healthy when it left the house, and so far it has resisted the onset of a sthenic disease; but when it was re-admitted, the other day, the mother developed *delirium tremens.* The nourishment the little one received was such as to deprive it of any resistance to the slow, but equally sure, exhausting process which is now taking place.

We will now give it—

℞. Syr. ferri iodidi, ℥ j
Emul. ol morrhuæ, (fifty p. cent) ℥ iij. M.
Sig.—Dessertspoonful t. d.

Milk punch; half ounce of whisky or brandy in the 24 hours, increased if needed, every afternoon, just before the hectic flush appears; a suppository of 2 grains of quinine.

The tinct. iodine to be painted over the back daily, the child to be well wrapped and taken, during the middle of a clear day, into the open sunshine. It should also have a tepid bath (salt water) every morning, or if it be restless at night, the bath had better be given before bedtime

Varicella, Modified by Congenital Syphilis.

The next case that I have to show you, this woman and her baby, is of peculiar interest; the mother is suffering from syphilis and the child from varicella; the interest lies in the fact that the infant is also suffering from congenital syphilis, which causes an interesting modification of the eruption as we shall see later on.

The mother, Annie O., was admitted to the house on October the twenty-second, 1881; she presented a well marked syphilitic rupia, which had gone on to ulceration over the tibia and malleoli. The woman was at once placed on an anti-syphilitic treatment, to which she responded rapidly; on November the twenty-seventh, 1881, she was delivered of a female child, that presented no traces of syphilis on the cutaneous surface, but a short time after birth it suffered from *snuffles*, which is, as you know, such a common affection in these children.

The mother's anti-syphilitic treatment was continued, the child receiving its medicine through the medium of the mother's milk.

When the infant was three months old it was vaccinated with bovine virus; on the fourth or fifth day the arm became sore; but it was not a typical vaccination, or, in fact, was spurious, leaving no scar whatever. Synchronously with the development of the sore on the arm, a specific eruption appeared, confined to the buttocks, thighs and face. The eruption was of the papulo-squamous variety, with deep coppered-colored staining around the base of the papules; at this time the child also suffered from coryza, sore eyes, etc.

The mother was at once ordered increasing doses of the bichloride of mercury and the iodide of potassium; the child was simply allowed to nurse on the mother's milk, and thus absorb the anti-specifics; under this treatment the infant rapidly improved, and finally the eruption disappeared.

About a week ago a general epidemic of varicella broke out in the obstetrical wards, this child being affected with the rest; at first the eruption was simply the characteristic one of varicella, which, as you can see by these other children, is simply a vesicle, not surrounded by any inflammatory redness; these remain vesicles, and do not usually become pustules; occasionally the contents become tumid, owing to presence of pus; they attain their height on the third or fourth day of the eruption. then burst and shrivel, without presenting depressions at their apices; the crust, which will fall off in about five days subsequently, will be followed by a smooth, shining, round and irregular pit.

In this case, as you see, instead of a simple, isolated vesicle, appearing in crops, we notice that they are confluent, several having run together; they are also copper colored, the deepest staining being at their bases.

When the eruption has become confluent, it has an eczematous appearance; this is especially noticeable where we have heat and friction. In other portions of the body the eruption partakes more of the appearance of syphilitic psoriasis. *Microscopical examination* of the contents of these vesicles, made by the microscopist, Dr. H. F. Formad, and the assistant pathologist, show them to be crowded with micrococci zooglœa; none are seen within the white corpuscles. Examination of the blood, taken from the child's finger, shows the entire absence of micrococci in that fluid. The mother shall continue the same treatment, and the child will receive its mercury and iodine through the mother's milk.

Insurance by Medical Men.

We note from the Glasgow *Medical Journal*, that according to a scheme worked out by the Edinburgh Insurance Company, a medical man, by paying a fixed annual sum (say $150, if he be 30 years of age), will secure the payment of $5000 to himself at the age of 60, or to his heirs, should he die before that age. Then, if it be preferred, the $5000 may be converted into an annuity, payable during his own or his wife's, or their conjoint lives. If a member should at any time cease paying his premiums the company will pay, on his reaching 60, or at his death, a larger sum than he has paid in premiums. Thus, if a person during seven years has paid $1060, he will receive at 60, or his heirs will receive at his death, $1165. This is an example well worthy of imitation in our own country.

Editorial Department.

Periscope.

Pulmonary Abscess Opened Antiseptically.

In the *Lancet*, April 15th, 1882, Dr. Henry Payne records the following case: A young, healthy man, with no hereditary taint, was admitted into the hospital with well marked signs of pleuritic effusion on the left side. The trouble commenced six months before, with chills, pains in the left side, and feverishness, from which he was relieved by medicine and blistering the side, when he was able to continue his work for two months, at which time he commenced to experience difficulty in breathing and slight cough. He said he had spat blood once or twice. These symptoms becoming worse, and being unable to work, he was admitted into the hospital, June 22d, 1881. The side was painted with tincture of iodine, and iodide of potassium with cod-liver oil administered internally. This treatment was continued until August 20th, without any improvement, when the following signs were noticed. The patient has lost flesh since his admission; the left side of the chest bulges more than the right, and measures an inch more around: movements on this side are deficient; there is absolute dullness on percussion, both back and front; no breath sounds are heard, and the vocal fremitus and resonance are absent. The breathing on the right side is exaggerated. The cardiac dullness is continuous with that of the rest of the side; no apex beat can be seen or felt, and there is no displacement. Upon auscultation, aortic murmurs are heard, and the pulse is of the "water hammer" character. He has night sweats: temperature every evening is above 100°, and the pulse invariably above 100. Empyema was suspected, and an exploratory puncture made in the sixth intercostal space, in the axillary region, discovered pus. Accordingly, on August 23d, an incision, about two inches long, was made, just above and parallel to the seventh rib in the anterior axillary line, antiseptically and under chloroform. Upon opening the pleura, there was very profuse hemorrhage, of dark venous blood, which could only be arrested by the injection of a solution of the perchloride of iron. About fifteen ounces of pus escaped. Passing the finger through the wound into the cavity, there appeared to be a number of adhesions, some of which were broken down by the finger. A drainage tube was inserted. The dullness disappeared after the operation; the same side became hyper-resonant. Patient felt much easier, and could now lie on the right side for the first time since the illness. There was a very profuse discharge, which in a few days became fetid. He had now a very troublesome, irritable cough, with much frothy, muco-purulent, bloody expectoration. He continued fairly well until the 29th, when the temperature suddenly rose to 103.4°; he had great pain in chest, voice became very weak; perspired freely, lost his appetite, and gradually sank, dying on the morning of the 30th.

The necropsy showed the whole of both surfaces of the left pleura adherent, without a drop of fluid in the sac. The external opening made in the chest wall led into a large, irregular cavity, situated in the centre of the lung, which was in a state of grey hepatization. The opposite lung was healthy, but congested. The heart was small and flabby, and the valves healthy. Other organs normal. This was evidently a case of chronic pneumonia, ending in the formation of an abscess. It is interesting on account of its rarity and the difficulty of diagnosis. Trousseau failed to meet with a case during his first twenty-five years as a hospital surgeon. The difficulty in diagnosis has been made apparent, by the symptoms already described, which pointed so strongly to empyema. The question might be asked, whether, if the case had been left to itself, would the abscess have ever opened and discharged itself into the bronchus, and so the pus be expectorated, or would it ever have burst externally? It could not have opened into the pleural sac, because that was closed by previous inflammation. The symptoms that were present after the operation were explained; the irritable cough and profuse purulent expectoration mixed with blood were due to the finger breaking down lung tissue, which was at the time supposed to be adhesions. The hyper-resonance was due to the cavity being filled with air. But one thing remains unexplained, the aortic murmurs when the valves were healthy. The only assignable cause is pressure

Fungosities of the Bladder Cured by Scraping With the Finger.

In the Boston *Medical and Surgical Journal*, Dr. Walter F. Atlee reports a very rare and interesting case.

Miss S. B. consulted me in the summer of 1880, on account of painful and frequent micturition, with hæmaturia. She was born in April, 1861: her father is a large, strong, and healthy man; her mother died when she was a child, after having suffered from many manifestations of scrofula.

She said she remembered to have felt, occasionally, a slight pain in passing urine, from her earliest recollection. When seventeen years of age she first suffered severely; her urine was then very light in color, with no sediment, but with a strong odor. The pain was while passing the urine and after it had passed; after the emptying of the bladder there was a constant desire to pass something more. She became thin, pale, and haggard. When eighteen years of age some pus appeared in the urine, and occasionally a little blood. These symptoms increased to such an extent that she was obliged to keep her bed for several months. This rest, aided, perhaps, by medical treatment, for she had always enjoyed the care and attention of our most experienced physicians and nurses, made some improvement in her condition, so that she was able again to go out. All the worst symptoms, however, soon returned, and when I saw her, in

September, 1880, her state was a very serious one; there was constant inclination to empty the bladder, which could not be resisted oftentimes for more than a half hour, and the loss of blood was considerable.

The urine, when examined at this time, showed pyoid bodies, epithelium from the bladder, and crystals of triple phosphate, together with blood corpuscles in abundance. The blood was of a bright-red color, showing that the urine had not time to produce those changes in color always produced by long contact with the hæmoglobin of the corpuscles.

With such symptoms, this case seemed clearly to be one of foreign body in the bladder, and the advice given was to attempt its removal without delay. For this purpose the patient was put under anæsthetics, and the urethra was dilated by means of a pair of ordinary dressing forceps, introduced opened, and withdrawn as often as necessary—this being, in my experience, the best way of effecting this dilatation.

When the finger was then passed into the bladder nothing abnormal was felt, no calculus, nor distinct tumors, except that about the fundus were a number of fungosities or soft growths, some of them more than half an inch in length, and about one line in thickness. These were carefully scraped off by the end of the finger and by the finger-nail. This simple operation resulted in the perfect cure of my patient, and until the present time there has been no symptom of a return of her disease.

I call the growths thus removed fungosities, and not villous growths, inasmuch as they were not like tufts of fine hair (*villi*), but resembled rather *fungi*, or certain mosses. I have several times seen similar growths removed from the cavity of the uterus, in cases where for years they had been the cause of alarming hemorrhage. They have, anatomically, the same fundamental structure as the mucous membrane whence they spring; they are simple excrescences of this membrane; they are formed of granular, amorphous matter, of cellular tissue in small quantity, and of fibro-plastic elements; almost all have a large number of capillary vessels ramifying through them, and some are covered by epithelium. This epithelium is *on* the surface, *homologous*, and not *within* the subjacent connective tissue, *heterologous*, which is characteristic of epitheliomatous growths.

Acute Traumatic Malignancy.

Dr. Henry B. Walker reports the following interesting cases in the *British Medical Journal*:

Case 1.—A master mariner, aged 53, was always healthy until fourteen weeks before death, when he was struck violently in the right hypochondrium by the shaft of a cart. The blow rendered him unconscious. He was laid up for two days, when, although feeling "very sore and ill," he started on a voyage. During the trip he was in much pain, and on his return was laid up again. Feeling better, after some rest, he took another voyage, but was so ill that he had to give up command. His symptoms were frequent vomiting, complete loss of appetite, intense pain in the region of the liver, shooting across the epigastrium. He was much bruised and very tender. On examining the abdomen, he was extremely tender all over the region of the liver in front, the tenderness extending to the left hypochondrium and down nearly to the navel. There were no signs of enlarged liver, but some jaundice, with pale stools and constipation. A fortnight later his condition became gradually worse, a well defined and tender bossy mass, with rounded edges, under which the fingers could be passed, was found projecting below the ribs (at a point which would be intersected by a line drawn perpendicularly from the anterior superior spinous process of the ilium), and extending well into the left hypochondrium. This mass, which was taken to be liver, extended downward and to the left side till it filled the abdomen in front to a level with the umbilicus. Its extreme hardness and the constant presence of sharp, lancinating pain, together with the cachexia accompanying it, led to a diagnosis of malignancy, which was confirmed by an eminent consultant. Toward the last week of his life the patient vomited a quantity of blood containing pyriform and oval multi-nucleated cells. After the last hemorrhage the patient died exhausted. A post-mortem was denied, but there was no doubt in the minds of three medical men as to the nature of the disease, and it was believed to be carcinoma of the liver, invading the stomach secondarily. There was no history of malignancy in the family. No history of dysentery or syphilis was attainable.

Case 2.—Mr. F., a farmer, was out shooting; and while he was trying to force his way through a hedge a thorn penetrated his trousers and wounded his prepuce, causing blood to flow. He took little heed of it at the time; but a few days later, feeling some heat and uneasiness, he found swelling and irritation about the wound. This rapidly increased, and he then consulted his medical man, who advised certain remedies. The penis grew worse, and the whole glans presented a mass of carbuncular hardness in a short time, and was very painful. An incision into it giving no relief, and suspicion being confirmed on consultation, the penis was amputated, and the growth proved to be epithelioma. This was only a few weeks from the date of injury.

Case 3.—A gentleman rode to hounds mounted on a very broad backed horse, and in the evening felt the inner side of his left thigh stiff and sore. The stiffness persisted, and was followed by a slight fullness, and finally, by a well defined tumor about the size of an orange, nestling among the deep muscles of the thigh. This was removed by operation, and proved to be a small, spindle celled sarcoma.

Case 4 was related to me by a lady whom I was attending in labor. Her brother was playing football, when he received a kick on the shin. This led to severe inflammation, which laid him up for some time. On apparent recovery, a hard swelling remained on the tibia, which soon began to cause pain and enlarge. As it increased and bore suspicious characters, the limb was amputated at the knee joint, but the growth recurred, and the patient lost his life. I asked the lady what the growth was, and she said, "The

doctors did not call it a cancer, but by a queer name—'sarcoma.'"

In all the foregoing cases, the patients confidently referred to their injury as the cause of the trouble; and in all except the last, I can state that minute inquiry failed to trace a family history of malignancy. In the last case, I have no note on this subject, and therefore cannot speak with certainty, but I believe I was assured that such was the case in this one also.

Extirpation of the Ovaries for Insanity.

In the *American Journal of Insanity*, January–April, 1882, Dr. Wm. Goodell contributes an article from which we extract the following:—

By the aid of Listerism, abdominal surgery has reached such a pass that many formidable operations involving the hitherto sacred peritoneal cavity are daily undertaken, with a success and a degree of safety as much assured as in surface surgery. Even exploratory incisions are boldly made, merely for diagnostic purposes. Hence it is that ovariotomy is now one of the most successful of the major operations. Hence it is that oöphorectomy, or the extirpation of the ovaries—not for any intrinsic disease, but merely to bring on the climacteric—has been placed on a firm basis.

The disorders of menstrual life for which the ovaries have been successfully removed are fibroid tumors of the womb, chronic pelvic peritonitis, persistent ovaritis and ovaralgia, ovarian epilepsy, dysmenorrhœa, menorrhagia, and, in short, for all those lesions which are brought about or which are intensified by the periodic congestions of menstruation.

To this list there can be no doubt that some forms of insanity ought to be added. The relation which they bear to menstruation is often a very close one—so close, indeed, that the term ovarian insanity would best define it. Thus all alienists have observed cases of mental disorders in which the periods of exacerbation correspond to those of menstruation. In the interval between the monthly fluxes the patient may be either wholly sane or at least quite controllable. Esquirol and Morel have gone so far as to assert that derangements of menstruation form the source of origin of one sixth of the cases of insanity due to physical causes.

Now it seems to me that, since the verdict of the profession is largely in favor of the removal of the ovaries for many physical derangements dependent upon menstruation, the same remedy should, *à fortiori*, be tried for those mental derangements which plainly arise, or seem to arise, from the same source. The objections to such remedy when applied for mental diseases, are, in fact, less valid than when it is resorted to for physical lesions. For, in the first place, an insane woman is no more a member of the body politic than a criminal; secondly, her death is always a relief to her dearest friends; thirdly, even in case of her recovery from her mental disease, she is liable to transmit the taint of insanity to her children, and to her children's children, for many generations. The removal, therefore, of the ovaries in such a case would then tend to restore a woman to home and to society, and it would at the same time effectually bar her from having an insane offspring. I am, indeed, not sure that in the progressive future it will not be deemed a measure of sound policy and of commendable statesmanship to stamp out insanity by castrating all the insane men and spaying all the insane women. But laying all speculation to one side, I wish now to give my own limited experience in the matter, and to put it on record, so that others may profit by it.

He then records the histories of four cases, in which the operation afforded relief. The relief is not immediate, but requires time, and for a cure it is necessary that the patient should be afforded change of scene and occupation in connection with the operation.

In conclusion, he says: "Let me make a few remarks about the mode of performing oöphorectomy. Until very recently, I have warmly advocated the removal of the ovaries by the vaginal incision, and, indeed, I would now perform the operation in that way were the ovaries so low down in Douglass' pouch as to be readily felt through the walls of the vagina. But the dangers and difficulties of such an operation, when the ovaries are high up, more than counterbalance its advantages. Twice have I failed to remove them per vaginam, and had to resort to the abdominal incision; and once, from the return of menstruation, I think that some ovarian tissue was left behind. For these reasons, and also because I have found so little inflammatory reaction following the larger operation of ovariotomy, I shall in future perform oöphorectomy by the supra-pubic incision, unless the ovaries are low down.

Infectivity of Scarlet Fever.

At a meeting of the "Society of Medical Officers of Health" (*British Medical Journal*) Dr. Alfred Carpenter read a paper on some of the causes which increased or modified the infectivity of scarlatina. He considered that a long period of quarantine—such as eight or ten weeks, and sometimes four months—was to be deprecated in the case of children recovering from scarlatina; he himself, for many years, had isolated cases for a fortnight, and in some instances for a week only, after the departure of the fever and he had never heard of any evil results accruing from such a course. He next mentioned various cases in large schools, which served to explain his views as to the causes of scarlatina. The first outbreak of which Dr. Carpenter made mention was, in his opinion, entirely caused by a cesspool situated in the school yard, which was the recipient of washings from a slaughter-house; and, once a week at least, the aerial contents of this cesspool were displaced into the closets of the boys, situated in close proximity to it. As soon as this cesspool was emptied, and the drains properly directed into the sewer, scarlatina ceased to appear in the school. Want of proper ventilation in the soil pipe and drains belonging to the building caused an outbreak of scarlatina in another school—the drains being in direct communication with the main sewer of the district, and scarlatina being also at that time very prevalent in the neighborhood. Dr. Carpenter be-

lieved that the nature of the blood into which the poison was received aided more materially in increasing the mortality from scarlatina than the character of the poison itself; and in support of this theory, he instanced two outbreaks of this disease, in one of which the mortality had been excessive, fourteen persons having died out of seventy-five who were attacked; and in the other outbreak only three deaths occurred, though the total number of cases was one hundred and eight. Dr. Carpenter attributed this difference in the mortality to the surroundings of the children; in the one instance, the conditions were, on the whole, healthy; while, in the other, the children were exposed for a much longer period to an impure atmosphere, and were badly cared for at home. The cause of the two outbreaks was similar in character: the excreta of the first case of scarlatina, in each school, passed down unventilated drains, which communicated directly either with class-rooms inhabited by the children, or with closets used by them. In conclusion, Dr. Carpenter said that he believed scarlatina more often arose from sewage emanations, or from sewage contaminated with scarlatinal germs, than from personal contact. He considered that, in many cases where the cause of the disease had not been discovered, it might have been found, on careful investigation, to proceed from some accidental inhalation of sewer-air; and that persons who were constantly exposed to such an atmosphere were liable to more severe attacks of scarlatina and diphtheria than those who inhaled the poison for a short period only. Dr. Carpenter also suggested that the discharge of hot water and waste from steam engines into the sewers was a source of danger, in producing scarlatina and diphtheria.

Action of Chloroform.

In the discussion which has for several weeks occupied the attention of the Academie de Medécine, regarding the symptoms observed during chloroformization, M. Vulpian, at a recent séance (March 28th), expressed the following opinions concerning the practical and experimental questions brought forward by the different speakers:—

The symptoms induced by chloroform are observed generally at three principal periods—either after the first few inspirations, or while the patient is gradually coming under the influence of the drug, or, again, within a few hours or even a few days after chloroform has been administered.

Excitation of the superior ends of the upper laryngeal nerves induces arrest of perspiration, and the same effect is obtained when one of the nerves controlling the upper segments of the respiratory organs is touched with a camel's hair pencil wet with chloroform. During his experiments M. Vulpian remarked that animals, dogs especially, do not support as well as man the action of chloroform. The symptoms observed are due to arrest of the heart (cardiac syncope) or to that of the respiration (respiratory syncope). Chloroform does not invade successively the different organs; it acts immediately and at once on all the tissues. The respiratory centre seems to offer a notable resistance to its action, but is not entirely spared.

If the pneumogastric nerve be divided in an animal under the influence of chloral or chloroform, the animal continues to breathe, notwithstanding the section of the nerve. Excitation of the central end determines sudden and immediate arrest of the respiration, lasting from one-half to one minute. Excitation of the peripheric end in a chloralized animal produces complete and definite arrest of respiration, and while in the non-chloralized animal there is but a momentary arrest of the heart, in the other the heart beat ceases and the animal succumbs. Anæsthesia acts, then, on the cells of the respiratory centres, also on those of the sympathetic ganglia, which control the action of the heart, and these ganglia are no longer capable of resuming their functions when these have been once abolished by any excitation, electric or otherwise.

In unfortunate cases, when all the organs are under the influence of chloroform, the animal continues to breathe and the heart does not cease beating; but if too large a dose be administered, or any excitation of the pneumogastric take place, then respiratory or cardiac dyspnœa supervenes and the animal succumbs. Symptoms may supervene while operations are being performed, when anæsthesia is complete, demonstrating that the cord conserves its powers of conduction, even when under the influence of chloroform; and that peripheric excitations are transmitted without cessation to the bulb. Under such conditions syncope, of bulbar origin frequently supervenes.

On animals cardiac syncope is of greater gravity than that induced by arrest of respiration, for in the latter case artificial respiration may and should be resorted to. M. Vulpian concluded by saying that chloroformization is never exempt from danger, as syncope is always imminent.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——"The Mental Status of Guiteau," by Walter Channing, M.D., comes as a reprint from the Boston *Medical and Surgical Journal*, March 20th, 1882. The author maintains in this paper the insanity of the criminal, and concludes by saying: "It would have been much more to our credit as a country, much more in the interests of humanity and progress toward better things, and what is still more to the point, much more in accordance with a correct interpretation of the evidence in the case, as presented to my mind, if the wretched Guiteau had been consigned, as a lunatic, to a criminal insane asylum for life, rather than sentenced to the gallows as a sane criminal."

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

VENESECTION.

Since the venerable Prof. Samuel D. Gross took such a decided stand in favor of venesection —now several years ago—the subject has been more or less fiercely debated in all the more prominent medical journals of our country. The readers of the MEDICAL AND SURGICAL REPORTER will have frequently read articles *pro et contra* on blood letting, and of late the dispute seems to have gained new impetus, if we can judge from the correspondence we received, and some of which we recently published. While many writers recommend bleeding from a vein in all acute inflammatory diseases, the greatest difference of opinion seems to prevail in regard to blood letting in acute, lobar or croupous pneumonia. To us it seems as if the extremists of both views go a little too far, that they are committing the same mistakes which our forefathers made about half a century ago; they consider too much the name of the disease, and not sufficiently the constitution of the individual. It would lead us too far, were we to mention all maladies in which, of late, blood letting has again been recommended, but we may be permitted to illustrate our views, or rather, what we believe to be the teaching of modern science in reference to this question, on two diseases, in which venesection has been especially recommended, pneumonia and remittent fever.

What is acute, lobar or croupous pneumonia? Is it simply a croupous inflammation of mostly the lower lobe of the right or left lung, due to an exposure to cold? Decidedly not. The modern view, that it is an infectious disease, with a special tendency to the lungs, like diphtheria, with its formation of false membranes, mostly in the throat, or like typhoid fever, with its ulceration of Peyer's patches and solitary glands, or like any other zymotic disease, gains daily more adherents. The truth of this assertion is proven by the following facts. It is a disease of a certain definite duration, mostly ending by a crisis on the fifth, seventh, or ninth day, a thorough sweat being followed by a refreshing sleep and resolution. That cases occasionally linger a longer time is no proof to the contrary, as we see the same happening in other infectious diseases. Further, the lesion, which often, in fatal cases, does not extend further than to the stage of red hepatization, and is frequently confined to only the lower lobe of one lung, is not alone sufficient to account for death. We have in tubercular phthisis far more destruction of lung tissue, and the individual lives sometimes for years. Other important points in favor of the view expressed are, the abrupt beginning with a chill, or with flushes of heat, the high temperature, and the frequent early complication of the same œdema of the brain as we find in cases of typhoid fever, when the pia mater is filled with bacilli typhosi. Lastly, death sets in—not in consequence of the local lesion—but by failure of the heart's action. If we have an anæmic individual with a weak heart, or an old person, not plethoric, would we strengthen the main organ of circulation by venesection? Is a tonic treatment with digitalis, quinine, stimulants, and later carbonate of ammonia, not a far safer plan? But if we find a young, strong, and plethoric individual, with intense engorgement of the lung,

there the first indication is the relief of the blood pressure, and we bleed such a person from the arm, not on account of the pneumonia, but notwithstanding the pneumonia, on account of his general condition. It is not the name of the disease which induces us to open the vein. If a similar individual would be attacked by a severe congestion of any organ, and due to some other cause, the same practice would hold good.

How should we proceed in remittent fever? At a time when venesection was fully in vogue, 75 per cent. and more died of remittent fever. James I, Cromwell, Charles the Great, and many other eminent persons, who could and did command the services of the most prominent physicians of their time, had to die of this disease. But what is the reason that, since the general adoption of the American practice, of giving quinine in daily doses of from twelve to sixteen grains, from the very beginning and all through the disease, the mortality is only 2 per cent.? Remittent fever is due to malaria; quinine is a specific against this poison; is it not more than logical to make use of this remedy as early as possible, and as long as necessary? No bleeding will here do any good; a venesection may cut short the cold stage of an intermittent fever paroxysm, but it will not prevent the recurrence of other febrile seizures nor ever cure remittent fever. We are aware, however, that the latter malady is often complicated by subacute meningitis. If this is severe and accompanied by a hard, tense pulse, then, if the patient is seen early, we would recommend blood letting from a vein, as in certain cases of acute meningitis, but not neglect the specific treatment. Notwithstanding a practicing physician of ripe experience is mentioned as authority, we will never believe in the cure of a genuine case of remittent fever by one or two venesections alone, and without the employment of quinine, or some other preparation of the Peruvian bark. To teach such a practice is exceedingly dangerous. We have in this malady, again, an illustration not to bleed on account of the disease, but because a certain condition of the patient indicates this therapeutic measure. If the hard, tense pulse and the subacute meningitis are not present, there is no need of bleeding, be the individual plethoric or not, as we have convinced ourselves frequently in private and hospital practice.

In conclusion, we will mention only one disease more, to prove conclusively how dangerous it would be to practice venesection in general without paying the utmost attention to the patient's exact condition. This malady is apoplexy. Formerly it was the practice to bleed in this disease. What does modern science teach? There are four main forms of apoplexy. In one the attack is due to active congestion (sudden but only temporary unconsciousness and transient paresis, with congested face, injected eyes, throbbing carotid, full, slow pulse); in the others to bursting of a blood vessel in the brain (long continued unconsciousness, followed by more or less lasting hemiplegia, face congested, pulse slow and full); in the third to embolism (presence of valvular disease of the heart, none or only momentary unconsciousness, mostly a sudden stroke of paralysis, face pale, pulse small and rapid); and in the fourth to serous effusion (mostly in Bright's disease, very pale face, dilated pupils, total unconsciousness and utter insensibility, often convulsions, pulse small, frequent and irregular, always rapidly fatal). The rule as regards venesection in apoplexy is, at present, bleed in the congestive form always, if the patient has not regained consciousness before we arrive; and in the hemorrhagic variety, if the pulse is very slow and full, and improves under blood-letting; but never bleed in cases of embolism or in the serous variety. We have, therefore, here once more the same rule: if you want to practice bleeding at the arm, be guided, not by the name of the disease, but by the condition of the patient. Apoplexy from active congestion is met with only in plethoric persons; if there are minute aneurisms and the bursting of one or more of them has caused the hemorrhagic variety, you will do good with venesection to relieve the blood pressure, but the pulse must be slow and full; if the latter is rapid and irregular there is no use in venesection; the effusion is too large, and death will take place under all circum-

stances. That blood-letting will be of no benefit in the other two varieties is too apparent to need further comment.

The modern practice regarding venesection, as well as all treatment, is undoubtedly the correct one: whenever attending a patient, base your therapeutic measures upon the general condition of the patient, but at the same time do not neglect the special indications the underlying disease offers; or, in other words, study thoroughly the *pathology of the case*, before you begin any active interference.

Notes and Comments.

Foreign Body in Œsophagus followed by Emphysema.

In the *Lancet*, W. Lewis Morgan reports the following case: A woman, aged 54, had just put a piece of pork in her mouth, and turning to say something to her child, the piece of pork "slipped back into her throat." This was followed by severe paroxysms of coughing and great difficulty in breathing. In a few hours her face began to swell. The face, neck and upper part of the thorax became much swollen and emphysematous. The loose cellular tissue beneath the lower eyelids was greatly puffed out. An attempt was made to pass an œsophageal bougie, but it was stopped at six inches by some obstacle. Ether was then administered and two more attempts were made to pass a bougie; the second was successful, the instrument passing into the stomach. It could be felt to push something before it. When the patient recovered from the effects of the anæsthetic she could swallow much better, but still the attempt caused great pain and spasmodic cough. She was discharged after ten days, well, the emphysema entirely gone. The piece of pork which caused the mischief was only just taken into the mouth, and consequently had not been at all chewed; it was all meat, without any bone. It seems difficult to account for the supervention of surgical emphysema; one would be inclined at first to ascribe it to some injury the result of an attempt to pass an instrument, but there can be no doubt, from the patient's account, that the swelling was previous to all surgical interference, and, in fact, was the cause of the patient's friends seeking medical advice. It has seemed to me that the phenomena may be explained by supposing that the meat, when first suddenly bolted, lodged in the back of the pharynx, over the entrance to the air passages; that this caused sudden and severe fits of coughing and spasm of the glottis; during these great expiratory efforts the trachea may have been slightly lacerated, or rather torn, and thus air would have been forced into the surrounding cellular tissue at each succeeding paroxysm of coughing; but I must confess that the explanation is not quite satisfactory, for one often sees patients afflicted with severe paroxysms of coughing and yet no rupture of the trachea takes place. The piece of meat could not have lacerated the œsophagus or trachea, for the patient is quite positive it was only lean, without bone. The subsequent history of the case would be against the food having passed directly into the air passages, although it might at first have lodged in the pharynx, and compressed the upper part of the larynx for a little time, then passed just down to the junction of the pharynx and œsophagus, whence it was pushed by the bougie into the stomach.

Hydrocele of the Neck.

At a recent meeting of the Glasgow Medico-Chirurgical Society (Glasgow *Medical Journal*), Dr. James Whitson reported a case of hydrocele of the neck. He first spoke of their extreme variety. The patient was a girl, 7 years of age, and the hydrocele was situated on the right side of the neck. It had first appeared when she was 5 months old, since which it had gone on increasing in size, but had never caused any inconvenience. The head was carried slightly to the left side. There was an oblique depression in the tumor corresponding to the sterno-mastoid. On August 14th, 1881, it was evacuated by the aspirator and continuous pressure afterwards applied. By the middle of November the cyst was as large as ever, and on the 18th, with antiseptic precautions, an incision was made into it. When it was thoroughly evacuated, tincture of iodine was applied to its interior by means of a brush. Decalcified drains were then introduced, and the wound dressed. Five weeks after operation the wound was healed, and the hydrocele has been completely cured. In discussion, it was considered that this mode of treatment was an improvement on the old method. Stuffing the sac with lint had been tried, but it set up a great deal of inflammation and caused puckering of the skin. Setons had also been used. One case was mentioned where the cyst had been washed out with chloride of zinc, and the result was good.

Hysterical Retention of Urine in a Man.

Dr. James Russell reports the following case in the *Medical Times and Gazette:* A man aged forty-one was admitted into the hospital complaining of complete inability to pass his urine and of defect in the free use of his legs. He brought with him a flexible catheter, which he kept by his side, by means of which he emptied his bladder three times in the day. His statement was that during the preceding fortnight he had experienced difficulty in walking, and that a week before entering the hospital he had suddenly lost the power of expelling his urine. He endured the retention of urine until the following day, when medical help was summoned and a catheter was passed without difficulty. He was at first supposed to be suffering from a paralytic affection, but further investigation threw doubt on the accuracy of this opinion, and confirmed a suspicion suggested by the very sudden manner in which such complete paralysis of the bladder appeared to have been effected. The man was very nervous, and eighteen months previously had experienced severe protracted mental strain. This was followed by a nervous tremor, especially when he was worried, which prevented him from sleeping. The urethra freely allowed the passage of a large sound and the prostate was healthy. There was a scanty deposit of leucocytes, but in other respects the urine was healthy. The catheter was permanently withdrawn, and the patient was told that he must send for one of the resident officers if he wanted his bladder emptied. The effect was almost immediate; on the following day or day after he passed his urine spontaneously, and from that time had no further trouble in this respect. The power of walking was recovered gradually.

In this case the sequence of events was very plain, and shed an interesting light on what probably occurs in many cases of hysteria. We have, in the first place, a morbid condition of the nervous system, consisting in a highly sensitive state of the recipient centres, engendered by much anxiety, acting on nerve-tissue already by predisposition intolerant of any unhealthy influence, as indicated by the nervousness, the tremors, and the sleeplessness. The effect of the limb-pains, in themselves by no means severe, in restricting the free use of muscles and joints to such an extent as to interfere with locomotion, pointed to morbid sensibility to pain. Under these circumstances urethral irritation of a very mild character (for it was never spoken of afterwards) was set up—possibly rheumatic, or connected with the previous gonorrhœa, indicated by the leucocytes in the urine—and pain was produced in the urethra by the presence of urine. As a result, the pain in the urethra, just as the urine had entered the neck of the bladder, consumed the whole attention of the patient, and he forgot to exert the normal cerebral influence which is requisite in order to control the inhibitory centre of the vesico anal apparatus; the reflex activity of the sphincter vesicæ thus remained in full activity, and the passage of urine was effectually barred.

It is hardly necessary to recall the generally received opinion that a controlling centre probably exists in some part of the cord at a higher level than the genito-anal centre, which governs the action of the sphincter vesicæ; and further, that every one's experience supports the result of observation, to the effect that the controlling centre in the cord, or (if that do not exist) the entire urinary muscular apparatus, is subject to the influence of the cerebrum.

The case has much analogy with hysteria, both in its substratum of an abnormal condition of the nervous centres, and in the presence of some local defect as the immediate cause of the morbid development; as, *e. g.*, witness how many cases of hysterical aphonia start from an ordinary catarrhal sore-throat.

The African Treatment of Insanity.

The *American Journal of Insanity* contains the following from the *Asylum Journal*, British Guiana, October, 1881, which, from its originality and the hints it contains, may prove of interest and service.

The following letter received from the wife of an aboriginal African now a patient in the Asylum tends to controvert the opinion held by some that insanity is unknown on the dark continent. It shows that it is sufficiently common for its hereditary character to be acknowledged, and for a recognized method of treatment to be formulated. Many alienist physicians in more enlightened countries may well envy the certainty with which a cure is effected in three months, and if the same result could be promised to them they might be inclined to try the plan. Although non-restraint and soothing principles of treatment are adopted it will be seen that prolonged seclusion is enjoined. Like the gods of old, the patient must have a special food and drink: unfortunately what these are is not specified. Does this not resemble the colored light treatment so lately in vogue in Europe, and is it much more irrational than it? "I came to the Doctor to let him understand about my husband's

sickness. So Master he is not a native for this country, the sickness he is troubled with is not a sickness for him to be here, some of his countrymen from Georgetown made me to understand so. They did went up the river to see him, so I tell them he is in the charge of the Doctor, they say that this sickness is from their country, it is the gift of God from their country from generation to generation as far as they know. If they were he wouldn't have been here to-day, because we would have know what to do to keep down the sickness from him. Sir the sickness don't require no noise at all, he must be in a house him alone and those who attended to him and they does not use him every kind of food, purpose food must be for him, and he must close him in a house for nine days then you will hear he himself call to go out and when you hear him call you must not keep him back at all that will make him cross. So I humbly beg you Doctor please to let him out, that countrymen may try with him a little, Sir because they fully understand what is his sickness and in they country it takes only three months to get better and since he is here this now twelve months, so please Doctor let him out let me try with him. They are Crumanty nation nobody don't understand ways excepting to their own country people."

Two Probable Cases of Trichinosis.

Dr. C. W. Wooldridge reports the following cases in the Boston *Medical and Surgical Journal*. He was called to see a man suffering from fever, and general sense of discomfort. The tissue about the eyes was greatly swollen, while a general puffiness seemed to be spreading over the face. There was no pain or inflammation, and no symptoms by which to locate the seat of the trouble. To make the matter more peculiar, a young man, aged 18, residing in the same house, was suffering from exactly the same symptoms, with the only difference that they were a few hours later in their development. He prescribed a little cream of tartar as a safe eliminatory, and awaited developments. The next day the fever was about the same, the swelling had become more general, involving the face and neck, while the hands and arms also showed some puffiness. There was a painful sensation over the stomach, and a diarrhœa, out of all proportion to the medicine given, had set in. On the fourth day the swelling had begun to diminish; but the fever and diarrhœa continued. By this time their complaints of muscular pain were much more decided. Trichinæ now suggested itself. They admitted having eaten a meal of new ham, several days before. The ham had, subsequently, been cooked and eaten, and no trace of it, or of the hog from which it was taken, could be found. After ten or twelve days there was a gradual improvement, but long after all actual disease seemed to have ceased, they were nearly helpless, and two months afterward they were but beginning, in a feeble way, to try to do some work. Twenty-two days after the beginning of the sickness a small piece of the deltoid muscle was removed, and subjected to microscopical examination for trichinæ, with negative results. The Doctor believes that mild cases of trichinosis occur much more frequently than they are recognized. The cause is found everywhere, and there is no practical way in which it can be detected and avoided.

New Treatment for Chordee.

M. Combillard recommends, in *C. Courrier Médical*, to calm the pain induced in gonorrhœa, by nocturnal erections and chordee, injections containing bromide of potassium.

These injections are not, as a rule, in any degree irritating; they may be made four times daily, the last just before bedtime. The liquid should be allowed to remain one or two minutes in the urethra, in order to have the desired effect. The following is the most convenient formula:—

℞.	Potass. bromid.,	ʒ iss	
	Tr. opii,	ʒ ss	
	Glycerinæ,	ʒ iij	
	Aquæ,	ʒ v.	M.

In fifteen out of eighteen cases there was rapid diminution, or complete suppression of the erections. Bromide of potash gives these happy results, undoubtedly, owing to its anæsthetic influence on certain mucous membranes in moderating their reflex excitability.

Gallo-Roman Remains.

In 1881 Dr. Habran presented to the Societé Médicale, of Rheims, bones collected from one tomb in the ancient Gallo-Roman cemetery, in the Faubourg de Laon, at Rheims.

These bones presented exostoses at the sternal extremity of the clavicle, and the inferior end of right ulna, junction of the dorsal vertebræ, and finally, ulcerations of the teeth, analogous to those described by M. Parrott in syphilitic children.

M. Habran is of opinion that this ancient inhabitant of Rheims was undoubtedly syphilitic, as proven by the traces left by the disease on the bones.

Resection of a Portion of the Stomach.

The operations of Billroth and Wolfler on the stomach have attracted considerable attention to the surgical affections of this organ (fibrous tumors, foreign bodies, etc.) and a number of other surgeons, among whom may be named Péan, Langenbeck, Rydger and Forelli, have opened the stomach with the scalpel.

The following observation by M. Cavazzini in *Gaceta Medica Provincie Venete*, 22d year is interesting, and has the merit of priority, as the operation was performed in 1874.

A woman, 27 years of age, suffered for over a year from pain in the epigastric region, with vomiting. Directly over the stomach, seemingly in the abdominal parietes, but not adherent to the skin, was discovered an indurated mass, from three to four centimeters in diameter. It appeared to be a fibro-cartilaginous body situated in the abdominal parietes, behind the fascia superficialis, in front of the peritoneum.

As irritating interstitial injections and other forms of treatment remained without effect, and the patient was sinking, it was decided to extirpate the tumor.

During the operation it was found that the tumor reached the walls of the stomach, rendering it necessary to penetrate the organ in order to remove it completely. Sutures were applied, but on the tenth day some of the contents of the stomach escaped at the wound; however, notwithstanding a slight erysipelatous attack about the opening, the patient entirely recovered in about two months.

The patient died of consumption five years later, and at the autopsy the fundus was found drawn upward and toward the left, under the diaphragm. The pylorus was adherent to the parietal peritoneum. Cicatrization of the wound was complete.

Puerperal Zymosis.

In the *British Medical Journal*, Dr. W. Barrett Roué says, "A very painful case has, within the last few days, come under my notice, which illustrates many of the points ably laid down by Dr. Braxton Hicks, in the *Journal* of March 25th. Mrs. B., a lady aged 26, passed safely through her second confinement. For several days all went well; then, all of a sudden, without any apparent cause, her temperature began to rise, and was soon between 104° and 105°. An examination of the sanitary condition of the house was made, with the result of finding sewer gas pouring up from the sink in the scullery, almost sufficient to blow out a candle held over it. The next evening I was sent for in great haste. I found her screaming at the top of her voice, and so violent it was as much as several attendants could do to control her movements, by force; she was suffering from an attack of acute mania. By means of chloroform and hypodermic injections, she was quieted, when typhoid fever was diagnosed, the spots on the abdomen being characteristic. The delirium lasted eighteen hours, after which the patient became conscious and took nutriment well; but such was the frightful exhaustion, caused by her condition, as described above, that she sank slowly and eventually died, in spite of every care and attention bestowed upon her. Surely, it is time the law took cognizance of cases like this. Something should be done in the way of compelling landlords and builders to produce a certificate from a surveyor or other competent person, to the effect that their property is properly drained, previously to a new tenant going in.

Intertrigo in Young Children.

M. Klamm recommends the following powder as very effective in all forms of intertrigo in infants:—

℞.	Magnes. calcin.,	ʒ ij	
	Talc. powder,	ʒ iv	
	Acid. salicylic pulv.,	ʒ ss.	M.

All the ingredients, particularly the magnesia, should be reduced to very fine powder. Salicylic acid may often be advantageously replaced by boracic acid.

This powder has also often been employed with very great success against the various forms of erythema and eczema, which are developed about the anus in young children, under the influence of diarrhœa. It is of great benefit, too, in seborrhœa of the scalp; in ulcers of the lower limbs, and finally, as an application to vesicated surfaces.

Diseases of the Ankle Joint.

At a recent meeting of the Medico-Chirurgical Society, of Edinburg (Edinburg *Medical Journal*), Mr. Joseph Bell, showed a patient who had suffered for some years from disease of the ankle joint, but whose foot he had been enabled to save by means of a free antiseptic incision. He thought it was rare that good results were seen in cases of joint disease of long standing. This patient, a boy of 19, had suffered from pain in the ankle for nearly five years. For the last two years the pain had been intense. He was unable to put

his weight on it, and sometimes was even unable to sleep at night. The disease was entirely confined to the ankle joint. It was decided to make a free incision and thorough drainage, under antiseptic precautions. The incision was accordingly made. An ounce and a half of pus was let out, and a drainage tube passed into the joint. The symptoms were at once greatly relieved. The patient remained in the hospital about two months, and was sent out with the wound healed and a starch bandage on, to keep the joint quiet. This was now off, and the movements at the ankle were almost perfect and there was no evidence of disease. He will go about for some time on crutches.

Incontinence of Urine—Circumcision—Recovery.

Dr. Wm. Muir reports the following in the Glasgow *Medical Journal*, April, 1882: "A boy aged twelve was admitted into the Royal Infirmary, suffering from incontinence. It commenced two years before, by pain on micturating, and shortly afterwards the urine came away of its own accord. No history of injury or any other disease. Urine quite normal. Was examined repeatedly for stone, and belladonna, iron, and Easton's syrup were tried in turn, but all of no avail. It was noticed that the foreskin was unusually long and a little inflamed. Circumcision was performed. The most satisfactory result ensued, and in two months the patient was discharged quite cured."

Extirpation of a Pulmonary Hernia.

M. De Los Mozos reports an interesting case in the *Revista de medicinia y cirurgia practicas*. A young man, 17 years of age, received, in a fight, a large stab wound, three centimeters in width, between the fifth and sixth ribs, on the left side, and through it protruded a portion of the lung as large as a small orange.

The patient was pale, almost in a state of collapse, with filiform pulse, and suffered from incessant coughing, with sanguinolent expectoration; he could lie only on the right side. After forty-eight hours, however, his condition improved wonderfully, and remained so during the following days. As the portion of lung protruding, could not be reduced, the physician in charge fearing mortification, extirpated it entirely, applying the actual cautery to arrest hemorrhage.

The patient made an excellent recovery, the wound cicatrized well, and no deformation of the thoracic parietes or alteration in the respiration ensued.

Correspondence.

Puerperal Albuminuria.

Ed. Med. and Surg. Reporter :—

Under the above head Dr. Millikin reported a case of unusual interest in the Reporter for April 15th. I have notes of a case in some respects similar, which I venture to give, since the subject, although one of great interest, has not received the attention its importance demands at the hands of authors and teachers.

About the 1st of November, 1879, I was called to see Mrs. D., a young woman 21 years of age, about four months advanced in her first pregnancy, and with a history of good health. Never had had rheumatism, but had scarlet fever when quite young, during which period she was salivated severely. For some time after her recovery and during convalescence she was slightly dropsical.

I was called on account of the presence of general anasarca, which had begun to manifest itself some weeks previous. On my first visit I found the patient unable to wear a shoe, so great was the swelling of the feet. She complained of headache continuously, and at times her sight was defective. Of the source of the trouble there could be no question it was due to one of two possible agencies, either Bright's disease or the albuminuria of pregnancy. The urine on examination produced at least 75 per cent. of albumen. I sent a specimen of the urine to Dr. French, of Davenport, who examined it under the microscope, and found it to contain many tube-casts. The scarlet fever history rendered the trouble a little uncertain in its termination, for if the pregnancy were simply the existing cause of a malady that had been quiescent for some time, the probable ending of the case must be death, and that soon.

The treatment given at first was iron. The bowels were free and regular. I prescribed tincture of the chloride in full doses. It had the effect of preventing the increase of the anasarca, but that was all. There was no diminution of the swelling nor was the headache lessened. She was given the compound jalap powder, until free catharsis was produced. This lessened the anasarca, but did not remove any considerable amount of it, nor did it relieve the headache. By this time the case had assumed such proportions that it was equaled only by the number and variety of remedies used to relieve the patient. About the middle of January it became evident that unless some means to prevent the anasarca, be secured, premature labor must be induced. As a dernier resort, I prescribed fluid extract of jaborandi in half drachm up to drachm doses. In less than two weeks the headache was almost all gone and the anasarca greatly diminished. The patient continued to take the jaborandi until confinement, which occurred March 14th, when, after a labor lasting 30 hours, she gave birth to a large, healthy child. At no time did she show the least sign of a convulsion. In a few days after confinement all the anasarca disappeared and the patient has enjoyed good health ever since. There has been no albumen in the urine since.

I have not had an opportunity since then to try the remedy in a similar case. During the fall and winter of 1881-82, I gave the remedy to a patient who was suffering from Bright's disease. Before he had taken enough of it to test its virtues, he got drunk, and while enjoying a week's debauch was taken with convulsions and died.

Possibly others have used jaborandi, and with what success many of the profession, I doubt not, would be pleased to hear through the REPORTER.

Le Claire, Iowa. J. A. DE ARMOND, M.D.

Pruritus Ani.

ED. MED. AND SURG. REPORTER:—

This affection, though not very frequently met with, is one of the most obstinate to cure, or palliate. Authorities speak of it occasionally, and refer to it as a nervous disease. I have used most everything recommended, and until recently failed to either palliate or cure. The following formula has given general satisfaction, not only as a palliative, but a cure:—

℞. Flour of sulphur, ℥j
Petroleum mass, ℥j. M.
Make ointment.
Sig.—Apply once daily.

The remedy would indicate the disease to be of a parasitic origin. The sulphur combined with cosmoline, vaseline, or lard, does not give the same results. I think much of the petroleum mass in all diseases characterized by itching. Although it has been abused by being extensively advertised as a quack remedy, it has many valuable properties as a therapeutic agent.

The above formula never fails to cure dandruff of the scalp or pruritus on any of the hairy portions of the body. M. MILTON, M.D.

Bradford, Pa.

Jaborandi.

ED. MED. AND SURG. REPORTER:—

The first number of the MEDICAL AND SURGICAL REPORTER for April is at hand.

I write because I am heartily in accord with the able editorial on "Jaborandi," and wish to give a few notes of a case in which jaborandi was used with marked benefit.

January 10th, 1882, was called to see a child, five years of age, who was suffering with scarlatina. In a few hours after the onset of the disease the child became violently delirious; temperature 106° F.; pulse 160–180. The eruption came out the next day and was very profuse. Under ergot, bromides, calabar bean, etc., cerebral symptoms gradually subsided, and on the fourth day the fever began to subside, and the child became rational. However, the urine remained scanty and highly albuminous, notwithstanding the usual means for its relief—as purgatives, counter-irritation in lumbar region, steam baths, etc.—were used freely and early. During the third week there was suppression of urine for three days, with excessive vomiting, dropsy, etc., though there was no coma. Elaterium was used several times, and the watery discharges gave temporary relief. Upon the morning of the fourth day I gave half a drachm of fl. ext. jaborandi, and within ten minutes diaphoresis commenced and soon became excessive, the vomiting, etc., disappeared, and within four hours he voided half an ounce of urine. No more jaborandi was given, as the diaphoresis continued nearly all day, and before midnight he had passed several ounces of urine. This case recovered without further noteworthy symptoms. It is true that the elaterium relieved him, but the kidneys remained inactive, while, after the profuse diaphoresis, caused by a single large dose (for a child) of jaborandi, the kidneys soon resumed their function.

It may be that I over-value jaborandi, but it is certain that, in a similar case, I should use it again, and also think it might have relieved the delirium of the first three days as well.

Chicago, Ill. E. C. HELM, M.D.

Puerperal Convulsions.

ED. MED. AND SURG. REPORTER:—

In 1859 I read, in an article in a Medical Journal published in Columbus, Ohio, that the tr. of stramonium would cure puerperal convulsions by giving half an ounce at a time. It was also claimed that it would cure any other convulsions.

Not long afterward there was a case occurred near my office, in a female, about 55 years old. After five or six days her physician gave her up as a hopeless case. One evening, just as I was ready to make a visit in the country, her niece came to me and asked me to come and see her aunt, and try to do something to relieve her. I filled a half-ounce vial with the tr. of stramonium and directed a teaspoonful every hour till relieved. In about four hours I returned and found the vial empty. I was told that she had no convulsions after the last dose was given.

(Now I would not recommend the above heroic treatment in every case of convulsions; yet I would not hesitate to give the above treatment after all other legitimate treatment had failed.)

Her pulse was nearly normal, her breathing easy, and the next day consciousness returned. She never had any convulsion afterward, to my knowledge. E. A. OPPELT, M.D.

Loogootee, Ind.

Burns.

ED. MED. AND SURG. REPORTER:—

A burn with oil is the worst kind of a burn. Steam makes a very bad burn. To distinguish a burn from a scald, look closely and observe the hair. If the hair is entire, it is a scald; if it is a burn, the end or the whole of the hair will be minus. A large slight burn is more dangerous than a small bad burn. A burn over the abdomen is more dangerous than one over the thorax. When a burn covers over one-third of the body death may be expected; especially if it is on the abdomen. There are three stages of burns. 1st. Depression; 2d. Congestion; 3d. Reaction. Depression and congestion sometimes affect the brain and cause death by effusion.

Burns over the abdomen cause inflammation of the kidneys, which produces retention of urine. In such cases see to it that the patient urinates frequently. Cream of tartar in water should be given as a drink. For the intense itching caused by burns, nothing is better than liquor potassii arsenitis. In treating a burn, bring about reaction. Give ammonia and brandy by stomach or rectum. Keep the air from the burn and thus lessen the pain. If necessary, the child, or whoever is burned, may be placed in a tub of tepid water, and so exclude air till you are ready to dress the wound. Dry bicarbonate of soda, put on thickly and bandaged on, is a very good dressing. Some prefer it in form of a saturated solution. Glycerine, olive oil and vaseline are good dressings. But to exclude the air is of so much moment, that no time should be lost, and if no better substance be at hand, do up the burn in plenty of dry flour. Unless there is a copious discharge, burns should not often be dressed. If there is any considerable rise of temperature, tr. aconite should be given. If suppuration takes place, support patient by a generous diet, and give quinine and iron.

East Madison, Me. A. E. FARNHAM, M.D.

Revaccination.

ED. MED. AND SURG. REPORTER:—

In the number of the MEDICAL AND SURGICAL REPORTER for December 3d, 1881, I asked several questions on vaccination. Several answers have been received, but the answers to the most important question have been so conflicting that I will restate it:—

"Are there persons, *never having* had any vaccine marks or scars, who are insusceptible to the action of vaccine virus, and if so, are they exempt from variola." I have been vaccinated about thirty times the past year, usually using bovine virus on ivory points, but have taken the fresh lymph direct from a child's arm, and from the heifer. The operation has been performed on both arms and one leg, and by several physicians, using reliable virus. I will give a synopsis of the answers I have received:—

Dr. T. H. Manley, of New York City, in the MEDICAL AND SURGICAL REPORTER of December 17th, 1881, writes, "In *no one* is there such a thing as insusceptibility to the action of good vaccine virus properly inoculated. * * * * Possibly it may be that those whose symptoms are antagonistic to vaccination may not so *readily* acquire smallpox; but * * * when the disease does attack them it does so in all its malignity."

In the same issue of your journal Dr. J. L. Suesserott, of the "Jenner Vaccine Farm," of Chambersburg, Pa., writes:—

"There are persons who resist the influence of vaccination, and also of smallpox after repeated vaccinations, but it is altogether probable that there have been periods when, if properly exposed, they would have taken either disease."

Dr. J. M. Dixon, of Chicago Vaccine Farm, writes: "I am confident you are *not* susceptible to the vaccine disease, or smallpox, and think you need have no anxiety whatever."

E. M. S., of Providence, R. I., in MEDICAL AND SURGICAL REPORTER, writes: "I know that some persons are *temporarily insusceptible* to the effects of vaccine virus."

Dr. T. A. Worrall, of Northeast, Md., in MEDICAL AND SURGICAL REPORTER, of Jan. 14, 1882, supports the views of E. M. S.

These physicians, from an extensive and varied experience, are eminently qualified to speak, but inasmuch as there is not entire harmony between them, I would greatly desire to learn the views of others, and of the editor. E. C. HELM, M.D.

Chicago, Ill.

NEWS AND MISCELLANY.

Photographic Group of the International Medical Congress.

We notice in the *Lancet* that Mr. Barraud, of Gloucester-place, Portman square, has published a photographic group of many of the members of the late International Medical Congress. It includes 684 figures, who are grouped in an effective manner. The portraits are remarkably good, and the picture is a valuable memorial of the wonderful meeting of last August. We cannot help referring to the striking success with which Mr. Barraud has caught the likenesses of Prof. Charcot, Dr. Donders, Sir Thos. Watson, Prof. Huxley, Prof. Pasteur, Prof. Virchow, Prof. Esmarch, Dr. Bigelow, Mr. Spencer Wells, Mr. Luther Holden, Dr. Billings, Sir. Wm. MacCormac, Mr. Wood, Mr. Marcus Beck, Dr. Lancereaux, Sir Erasmus Wilson, Dr. West, and Dr. Wilson Fox. Mr. Barraud is to be heartily congratulated on the signal success of his picture, which is one of the largest and most interesting groups we have ever seen.

Consultations with Homœopaths.

The following is an extract from an article by Professor Palmer, in the *North American Review* for March:—

"The object of a medical consultation is to benefit the patient, to secure for him, by exchange of opinions and by mutual agreement, the best course of treatment. It is too evident to require to be stated, that there can be no agreement between a regular physician having any established professional views, and a sincere homœopathist. No benefit can arise to the patient from the practical disagreement which would be inevitable. The conscientious believer in the universal principle of *similia similibus* could not consent to the use of any remedy not selected in accordance with that law. One believing in the efficacy of infinitesimals and in the injurious effects of medicines in crude forms and sensible doses, could not consent, with any regard to the supposed interests of his patient, to the administration of the larger doses. If, for the purpose of securing patronage, the homœopathist pretends to a superior system in which he does not believe, and to a better practice which he does not follow, he is a charlatan and a pretender, unworthy of confidence or honorable associations. If a regular physician, for the sake of a consultation fee, or for the purpose of obtaining popular

favor, sacrifices his convictions, relinquishes measures in which he has confidence, and consents to a practice he is sure is useless, he may be a fitting person for such consultations, but he is not an honorable member of an honorable profession. If between an honest homœopathist and an equally honest regular physician there can be no agreement and coöperation in the treatment of a case, consultations are certainly useless, and no opinions need be expressed respecting consultations between parties one or both of whom are insincere. Should the homœopathist abandon his system, or the regular physician embrace it, there may be harmony and agreement, but until then consistency and honor, no less than proper professional feelings, will forbid the unnatural alliance."

American Medical Association.

The only railroads that have granted reduced rates for the thirty-third session are those between Chicago and St. Paul. The fare will be $12.50, or half fare from Chicago to St. Paul and return; granted only to those who exhibit their credentials, or an order from this office.

WILLIAM B. ATKINSON, M.D., *Secretary*,
1400 Pine Street, southwest cor. Broad.

The Secretary of the Surgical Section of the American Medical Association has the following progress to report in regard to papers for the next meeting: Prof. A. C. Post, "Lupus Exedens of Face;" Dr. J. R. Weist, "Elastic Tension in the Management of Cases of Delayed Separation of Ligature;" Dr. Henry A. Martin, "Advances in Conservative Surgery of the Joints;" Dr. Carl Seiler, "Some Remarks upon Electricity in Surgery;" W. M. Fuqua, "Subperitoneal Surgery;" Dr. A. Van Derveer, "Cleft of Hard Palate;" Dr. Oscar J. Coskery, "Modification of Plaster Splint;" Dr. G. W. Nesbitt, "Ununited Fracture of Femur Treated by Exercise;" Dr. John E. Link, "Alcohol as an Anæsthetic;" Dr. Wm. Hill, "Laparotomy;" Dr. Ephraim Cutter, "Bi fracture of Patella, Partial Bony Union after Eight Years." Dr. Wm. Stewart, "Fracture of Elbow-Joint." Drs. J. W. Dora, Joseph H. Warren, Henry O. Marcy, Edward Borck and B. H. Riggs promise papers, titles not received. The Secretary, owing to the death of the chairman, will read a paper on "Excision of Portions of the Alimentary Canal Covered with Peritoneum," as the Address on Surgery. Gentlemen wishing to read papers will please notify the Secretary of the Section. WILLIAM A. BYRD, M D.
407 *Jersey Street, Quincy, Illinois.*

Camden County Medical Society.

The thirty-sixth annual meeting of the Camden County Medical Society was held at the West Jersey Hotel on May 9th, with a large attendance. The proceedings were of much interest.

The report of Dr. Snowden, of the Standing Committee, on the prevalent diseases of the county during the year, indicated that malarial, typhoid and other specific fevers have been unusually prevalent, although the mortality has been light.

Dr. Benjamin discussed the importance of a thorough medical education, and the result was the adoption of the following:—

Resolved, That we, members of the Camden County Medical Society, will give our encouragement to those colleges which have advanced the standard of medical education. It was also

Resolved, That the greatest good to medical science, to the members of the medical profession, and to the public, is maintained by adhering to the code of medical ethics of the American Medical Association, relative to consultations.

The following officers were elected, and committees appointed for the year: President, E. L. B. Godfrey, M.D.; Vice President, John R. Haney, M.D.; Secretary, H. Genet Taylor, M.D.; Treasurer, Isaac B. Mulford, M.D. Standing Committee, Drs. Snowden, Branin, Shivers, Mulford and Smith.

Censors, Drs. Jennings, Schenck, Snowden and Branin.

Delegates were appointed as follows: To American Medical Association, meeting at St. Paul, Minn., in June, Drs. Schenck, Benjamin, Stevenson and Branin.

New Jersey Medical Society, meeting at Asbury Park, May 23d and 24th, Drs. H. Genet Taylor, Pancoast, White, Jennings, Smith and Wroth.

After dinner some of the gentlemen made remarks as follows: Dr. J. F. Garrison, on the "Philosophy of Darwin;" Dr. Ridge, on "Ancient Medicine;" Dr. Woolston, on "Medical Efforts of New Jersey During the Revolution;" Dr. Benjamin, on "American Surgery;" Dr. Snowden, on the "New Jersey Medical Society," and Dr. Schenck, on the "Medical History of Camden County."

State Hospital for Women and Infants.

We have received the Eighth Annual Report of the State Hospital for Women and Infants. From this report we note that this is the only institution in Pennsylvania organized and maintained for the express purpose of affording shelter to unmarried women. During 1881 there occurred in the institution 81 confinements. The average period patients remained in the hospital was 45 days. The average cost of board, including rent, was $4.90 per week. Contributions and bequests are solicited, and since the purpose is a worthy one, they ought to be forthcoming.

Typhoid Fever.

An outbreak of typhoid fever of a serious kind, in the Leicester Infirmary, has been carefully investigated, with the result, it is said, of pretty conclusively tracing it to the milk supplied to the institution.

College for Medical Practitioners.

A college has been inaugurated in St. Louis, for the purpose of teaching medical practitioners, by practical instruction, the branches of medicine and Surgery. The Dean of the College is Dr. Thomas F. Rumbold.

Medical College of Utah.

The Medical College of Utah, located at Morgan City, Utah Ty., has issued its third annual announcement for the session of 1882.

Lancaster County Medical Society.

The Lancaster County and City Medical Society have commenced the publication of their Transactions in a pamphlet, of about forty pages. Its management is in the hands of a publication committee.

College of Physicians and Surgeons of Iowa.

A circular has been received announcing the organization of the College of Physicians and Surgeons of Iowa at Des Moines. The college year will begin on the second Tuesday of October, 1882, and will include twenty weeks of instruction. J. A. Blanchard, M.D., of Des Moines, is Dean and J. F. Kennedy, M.D., of the same city, is Secretary of the Faculty.

An Anæsthetic Mixture.

The *Wien. Med. Zeit.* says that the Vienna mixture, under the use of which 8000 operations have been performed without a single accident, consists of three parts of ether and one of chloroform; and Billroth's favorite mixture is composed of three parts of ether, one of chloroform and one of alcohol.

Skimmed Milk.

The daily papers of May 2d state that a man in Troy, New York, who has been living on skimmed milk since January 13th, will continue his restricted diet for some weeks longer. He never felt better or stronger. His face is round and rosy and his weight 214½ pounds. He is apparently in good condition and experiences no craving for solid food.

Items.

—According to Sir Henry Thompson, soups are far too lightly esteemed by most classes. They are too often regarded as a mere prelude to a meal, to be swallowed hastily or disregarded altogether.

OBITUARY NOTICES.

JAMES R. WOOD, M.D.

Professor James Rushmore Wood, M.D., LL.D., of New York, died May 5th, at his residence in New York City, of pneumonia, aged 65 years. Dr. Wood's early opportunities for intellectual training were limited, owing to the very moderate circumstances of his parents, but with the irrepressible energy and ambition of true genius, he availed himself to the utmost of his meagre facilities, and finally graduated from the Castleton (Vt). Medical College, in 1846. He was at once appointed Demonstrator of Anatomy in his alma mater. He removed to New York City in 1847, and became connected with the Bellevue Hospital, and immediately undertook to reform its sanitary condition, in which he was ably seconded by Drs. Wilson and Drake, and Mr. Moses Franklin, then President of the Board of Aldermen. Within three years after the inauguration of this reform the statistics of the Hospital showed a reduction in mortality equivalent to the saving of 600 lives annually.

In October, 1856, Dr. Wood established the Saturday surgical clinics, which soon became very popular with both students and practitioners alike. From this small beginning was ultimately developed the Medical College, which was established in 1861, through his efforts, in connection with those of other leading physicians and surgeons. To this college his museum is given. He has been connected with the college from its inception, an active Professor of Operative Surgery until 1868, when he resigned, and since that in other relations. His Saturday clinics, which have contributed in no small degree to give prestige to the college, had been continued up to the time of his fatal illness. One of Dr. Wood's most important contributions to operative surgery resulted from his vast clinical experience at Bellevue Hospital. This was the first successful demonstration of the fact of the reproduction of extirpated bone, by a new growth from the periosteum.

During the great fever epidemic, when the grounds about the hospital were crowded with tents containing the afflicted, Dr. Wood's services were so highly appreciated that the Almshouse Commissioners offered him a special remuneration. This, in a monetary way, he declined, but asked and received permission to make all autopsies ordered by them.

While at Bellevue Hospital, Dr. Wood conceived the idea of the "Dissecting Bill," so called, by means of which a want long felt by medical schools was partially supplied, the law providing that all unclaimed bodies of vagrants, paupers, etc., shall be given to such institutions, for the purposes of the dissecting-room. Previous to the passage of this statute, bodies for dissecting purposes were obtained by raids made by students or professional "body-snatchers," from the Potter's Field, or such other burial-places as could be successfully raided.

His operations for calculi were numbered by hundreds. Indeed, no living surgeon has a record of so many capital operations with so little loss of life. His triumphs in surgery, joined to a genial disposition and winning address, resulted in a large practice and accumulation of a considerable fortune.

As a medical writer, Dr. Wood has not been prolific, his works consisting in the main of papers on surgical subjects read before various societies, such as his essays on the "Growth of Bone;" on the "Removal of the Entire Lower Jaw;" on "Ligature of the External Iliac Artery;" "Spontaneous Dislocation of the Head of the Femur," and the "Early History of Ligature of the Primitive Carotid Artery," all of which have been published, and are authorities in their special fields. He was a member of the New York Academy of Medicine, the American Medical Association, the New York Pathological Society, of which he was twice president; the New York Medical and Surgical Society, the New York Society for the Relief of the Widows and Orphans

of Medical Men, and the *Medical Journal* Association. He was also a corresponding member of the Historical Society of Yale College. As a clinical instructor, Dr. Wood was highly esteemed, and in this capacity he may be said to have been the pioneer of the new method—that which prefers the study of the patient to that of the text-book, and experience with disease to description in the lecture-room—a method whose traditions have become the feature of the college he founded. As a lecturer he was terse and vigorous, as a clinical Professor clear and exact.

JOHN T. HODGEN, M. D.

Professor John T. Hodgen, the distinguished medical teacher of St. Louis, died, after a very short illness, on April 29th. His death was the result of a rather singular cause. While giving expert testimony in court, he was compelled to ask to be excused on account of intense suffering. When he reached home, he was barely able to crawl up stairs on his hands and knees. Lingering for twenty-four hours in intense pain, he died. A post-mortem revealed erosion and perforation of the gall-bladder, with peritonitis. Professor Hodgen was a typically self made western gentleman. Born among the prairies of Illinois, and denied, on account of parental poverty, the advantages of early education, he was compelled to shift for himself. When twenty years old he began the study of medicine, and upon graduation, was appointed Prosector to the Chair of Surgery, under Professor McDowell. In 1850, he was made Demonstrator of Anatomy in the Missouri Medical College, and in 1852, Professor of the same branch. In 1861, he was elected to fill the same chair in the St. Louis Medical College. In 1872 he was elected Professor of Clinical and Military Surgery, which position he held at the time of his death. Dr. Hodgen was a great surgeon; he was especially blessed with the power of meeting emergencies. As a man, he was silent, thoughtful, dignified and impressive. His was a life to be imitated by all young physicians; enemies he had not, while all who ever met him were ever after warm friends. Want of space forbids a more extended notice, though much more could be said of this truly good man. Dr. Hodgen presided over the last meeting of the American Medical Association, at Richmond.

ERSKINE MASON, M.D.,

One of the attending surgeons of the Roosevelt Hospital, died on the 13th of April, at the age of 45.

At the opening of the Hospital, in 1871, Dr. Mason was appointed an attending surgeon, and he continued in that connection until his death, being then one of the two to whom the surgical administration of the hospital was intrusted.

Devoted to his profession from the commencement of his career, and with the advantages of education and experience afforded in this city, he had at the time of his appointment a high and honorable standing as a surgeon, and during the years which have elapsed, by his assiduous attention to the duties of his position, by performance of his full share of all labor, by many successful and difficult operations, and by the courtesy and kindness of his intercourse with all, he has added as well to his own reputation as a learned and able surgeon, as to that of the hospital with which he was connected.

DR. JOHN E. GILBERT.

At a meeting of the Medical Association and other physicians, held at the office of Dr. Robert Horner, Gettysburg, to take action on the death of Dr. John E. Gilbert, Dr. A. Nod, of Bonneauville, was called to the chair, and Dr. J. W. C. O'Neal appointed Secretary.

Drs. Charles Horner, James D. Weddelle and Robert Horner were appointed a committee, who reported the following preamble and resolutions, which were unanimously adopted.

WHEREAS, In the providence of God, death has once more entered the ranks of the Medical Society, and cut down Dr. John E. Gilbert, one of the youngest and most promising members of the Association, it is therefore

Resolved, That we feel a deep sorrow in the death of our late associate, one whose genial manners, laudable ambition in the practice of his profession, and whose faithful and honorable attention to duty not only endeared him to the members of this Society, but likewise to the community.

Resolved, That as a mark of respect we will attend in a body the funeral, which takes place on Sunday, April 23d, at three o'clock P. M.

Resolved, That the Secretary forward a copy of these proceedings to the family, to the Gettysburg papers, and THE MEDICAL AND SURGICAL REPORTER, of Philadelphia, and that they be recorded in the minutes of the Adams County Medical Association.

QUERIES AND REPLIES.

E. S. R., M.D.—For *Hyperidrosis of the Palms* we would recommend frequently washing the palms with a saturated aqueous solution of boracic acid.

J. W. C., Ala.—You can obtain the article you desire, pure, from any *reliable* drug house.

MARRIAGES.

BRITTON—KIRBY.—On Thursday, April 27th, 1882, in St. Paul's Church, Camden, N. J., by the Rector, Rev. J. F. Garrison, D.D., Dr. Charles P. Britton, of Trenton, N. J., and Katherine G., daughter of John Kirby, M.D.

CHEESMAN—CUYLER.—In Brooklyn, Thursday, April 27th, 1882, by Rev. Theodore L. Cuyler, Dr. Wm. S. Cheesman, of Auburn, N. Y., and Miss Mary E. M. Cuyler, only daughter of the officiating clergyman.

CHANCE—MICKLEY.—At the residence of the bride's parents, April 20th, 1882, by Rev. E. J. Fogel, Dr. H. M. Chance, of Philadelphia, and Miss Lillie E., daughter of Edwin Mickley, Esq., of Hokendauqua, Pa.

COVERT—QUICK.—By Rev. G. M. Potter, April 20th, S. J. Covert, M.D., of Evansburg, Pa., and Miss Ellen M. Quick, of Perrysville, O.

DEATHS.

PERHAM.—On Thursday, April 27th, Daniel W. Perham, M.D., aged 29 years.

PIERSOL.—Suddenly, on the 27th of April, Jeremiah M. Piersol, M.D., in the fifty-sixth year of his age.

STUDDIFORD.—On Saturday, April 15th, at Lambertville, N. J., Theodore H. Studdiford, M.D.

YOST.—April 12th, 1882, at Logansville, York, Co., Pa., Spencer Wells, infant son of Dr. George P. and Olivia V. Yost, aged 8 months and 27 days.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1318.] PHILADELPHIA, JUNE 3, 1882. [Vol. XLVI.—No. 22.

Original Department.

Lecture.

PURULENT INTERLOBAR PLEURISY; DISCHARGE THROUGH THE BRONCHIAL TUBES.

Delivered at La Charité Hospital,

BY M. HARDY, M.D.,

Professor of Clinical Medicine of the Paris Faculty.

Gentlemen:—My lecture to-day will be devoted to the consideration of the diagnosis of the malady of the patient in No. 17, St. Charles' ward.

I will first read the observation in full, as presented by my chef de clinique, M. Josias. The patient is a tailor, 44 years of age, who entered M. Hardy's service on February 20th, 1882. His family antecedents are good, his father dying at 80 years of age, from the effects of an accident, and his mother at 71, of a tumor in the axilla. Two sisters died very young, and he has four sisters and a brother living, all in good health.

Personal antecedents—no scrofulous accidents during childhood; at five years of age, smallpox; at twenty, gonorrhœa and chancre, which lasted fifteen days, and was not accompanied by bubo, syphilides or mucous patches. When 27 years of age he had an eruption of chocolate-colored spots on the breast; they were as large as a dime piece, not at all itchy, of an oily aspect, and persisted five or six years (pityriasis versicolor).

At the same period, while in Italy, the patient had a series of febrile attacks, concerning which he can furnish but incomplete data; they supervened twice monthly for two months, and consisted in a sensation of heat with profuse sweating and dyspnœa.

When 38 years of age he suffered from slight pains in both feet, with swelling of the toe joints, and since he has had similar pains every winter.

In October, 1880, he had attacks of dyspnœa, occurring principally at night, for ten days, accompanied with a painful stitch in the præcordial region, the slightest movement inducing dyspnœa. There was also considerable cough, with purulent expectoration, which continued, but without hæmoptysis, up to March, 1881.

On February 4th, 1882, pain supervened in the right side, without chill or dyspnœa, and since then he has been obliged to remain in bed, any attempt at standing proving impossible. There was no cough or expectoration. On February 18th he suddenly felt a very bitter liquid mount from the chest to the throat, and immediately vomited about a basinful of greenish, purulent liquid, of very fetid smell. For three hours after he was harassed with continual coughing, accompanied by excessive purulent expectoration, and this has troubled him since almost incessantly, up to the time he entered the hospital.

At present, although a man of apparently strong constitution, he seems almost worn out; the body covered with sweat, and the eyes somewhat sunken. Respiration is frequent and noisy; the cough almost incessant, but soft and not painful. Expectoration is abundant, frothy, slightly purulent, but not at all fetid, as it was yesterday.

Inspection shows no appreciable dilatation, or œdema of the thoracic parietes. Sonority is normal on both sides of the chest anteriorly; the vesicular murmur is somewhat obscure, and re-

placed by rude respiration, without râles, on the right side; on the left it is normal. Posteriorly, vocal fremitus is not as evident as usual low down on the right side, which seems, also, somewhat dilated; there is also diminution of elasticity on percussion over the right apex, and dullness over the lower two-thirds of the same side. On auscultation, there is blowing respiration over the angle of the scapula on the right side posteriorly, with slight friction murmur, and subcrepitant râles lower down.

There is neither egophony nor bronchophony, but amphoric souffle, with metallic tinkling, is heard over the right scapula posteriorly, when the patient coughs. The liver is not hypertrophied, but is somewhat painful when percussed.

February 22d. He rested well during the night, but had an attack of coughing, with considerable expectoration, this morning. Matters expectorated are slightly purulent and do not contain blood. There is now complete dullness over right side posteriorly; amphoric sounds are heard at angle of scapula, but no metallic tinkling. The general condition of the patient is satisfactory; the pulse at 120, the temperature 102°.

In the evening of the same day the physical signs were found to be about the same; the friction murmur being more evident, and heard over a greater extent of surface. There was considerable purulent non-fetid expectoration during the day.

On February 23d expectoration was more abundant and somewhat fetid; the fever continued with sweating. Over the lower third of the right side posteriorly there was still marked dullness with friction murmur and subcrepitant râles. There is amphoric souffles at the angle of scapula when the patient coughs. The left side is normal.

At 3 P.M. on the 24th he had a sudden discharge of about eight ounces of fetid pus. On February 25th his condition is about the same. There is considerable frothy, muco-purulent expectoration, which, on histological examination, is found to contain leucocytes in great number; very large pavement cells, with large nucleus, a few blood globules, but no elastic fibres. The cough is soft, almost immediately followed by expectoration.

Examination of the chest shows slight œdema of the thoracic parietes on the right side, but no dilatation.

Vocal fremitus remains somewhat obscure at the base of the lung, but dullness is not at all so marked.

Auscultation reveals large, dry bronchial râles under the right clavicle, and posteriorly on the same side sibilant and subcrepitant râles at the base, and friction murmur over the inferior two-thirds of the lung, obscuring the respiratory sounds. At the angle of the scapula the cough has a metallic ring.

Such, then, is the observations in detail, and it will be, I think, evident that the diagnosis presents many difficulties, and can only be established by proper analysis and discussion of the various symptoms presented by our patient.

The first which particularly attracts attention is the sudden and profuse expectoration of a fetid purulent liquid; to this phenomenon the designation vomica has been applied in France. Vomica, or the sudden discharge of pus through the bronchial tubes, was generally attributed by the older authors to the evacuation of a pulmonary abscess, and according to Laennec, such discharge implied the existence of lung cavities, to which, indeed in the English systems of pathology, the term "vomica" has been applied, but such is not the case.

To-day it is generally admitted that a discharge of pus through the bronchial tubes oftenest merely passes through the lung, originating either in the chest or abdomen.

Of all the morbid conditions which may give rise to such a discharge, pleurisy must be placed in the first rank. Pleurisy, in such a case, may be compared to a pleural abscess, rupture of the subjacent serous membrane and lung tissue establishing a communication between the purulent collection and bronchial tubes, permitting evacuation of the liquid.

This is the prominent symptom in the case before us; the sudden expectoration of a considerable quantity of pus after a fit of coughing would seem to point to the existence of empyema.

It must, however, be admitted that almost all the symptoms which usually characterize empyema are wanting, with the exception of the stitch in the side and the febrile reaction. The patient is, it is true, extremely feeble, and cannot support himself in a standing position; he has also some tendency to sweating, but the period of production of the pleurisy remains exceedingly obscure.

If it be really a case of empyema, revealed by the discharge of pus through the bronchial tubes, we are obliged to admit the existence of a communication between the pleural cavity and the exterior; in other words, we should seek for and find all the signs of pneumothorax.

But our patient presents none of the signs which would permit us to affirm the existence of pneumothorax or hydro-pneumothorax, and

what is more, all the symptoms of effusion into the pleura are wanting.

When a pleuritic effusion is discharged through the bronchial tubes we have generally dilatation of one side of the chest, with dullness at the base and exaggerated sonority at the apex of the lung, amphoric sounds, metallic tinkling, etc. The absence of all these symptoms renders the diagnosis difficult and obscure.

We consider that the discharge of pus in this case originates from empyema, but the assertion alone is not sufficient, it remains for us to determine with precision the point where the effusion was developed.

There has been no effusion into the grand pleural cavity, for the stethoscopic and other physical signs of such effusion are wanting. The purulent collection is in effect in the interlobar space. You are aware that pleurisy may be partial and limited to the inferior surface of one lobe.

Adhesions may in this way be formed about the interlobar space, so as to constitute a closed cavity, in which a liquid effusion takes place. While this inflammatory process is going on, the symptoms engendered are obscure, limited generally to slight pain and some slight derangement of the general health.

As the effusion increases the two lobes are compressed, and sometimes become so solidified that the purulent collection may be mistaken, as it was by the earlier authors, for an intra-pulmonary abscess.

In our case the liquid was effused under analogous conditions, finally acquiring such a volume as to compress the lung tissue ; then ulceration and perforation ensued, and the purulent collection was evacuated through the bronchial tubes.

These considerations, gentlemen, are by no means hypothetical ; they are drawn from the consideration of the symptoms presented by our patient. When he first entered the service we found on auscultation metallic tinkling and amphoric sounds with the cough ; these signs permitted us to affirm the existence of a cavity containing air in contact with the lung. At present there is merely a metallic ring to the cough, showing that the cavity which formerly gave rise to metallic tinkling still exists.

If, however, we take into account the conditions necessary for the production of this metallic sound, and the fact that it is heard only when the patient coughs, we are led to believe that the cavity is but of small dimensions.

From all these physical signs we conclude that this is a case of empyema, localized in an interlobar space, and in direct communication with the bronchial tubes, which explains the mixture of air with the purulent expectoration.

If the opening is obstructed, there is, for a time, cessation of the cough and expectoration, which again reappear as soon as the communication is re-established.

I cannot dissimulate how great is our embarrassment when we seek to determine the causes which lead to the development of this form of empyema.

Our patient is an over-worked, poorly nourished tailor, and it would seem that the malady was brought on by cold, and the nature of the liquid influenced by the bad state of the general health.

There is, then, interlobar pleurisy on the right side. But what is the precise location ? Between which lobes is the liquid contained ? This local diagnosis is always extremely difficult, but as we find the metallic ring with the cough and the metallic tinkling at the inferior angle of the scapula, it would seem very probable that the space between the two upper lobes on the right side contained the liquid.

What are the prospects of the case ? I do not hesitate to say, gentlemen, that the prognosis is serious. Our patient has intense fever, due to the constant production of pus, and is in imminent danger of falling into the hectic state, with all its consequences. We should not, however, be too positive, for similar cases are on record, where complete recovery ensued.

What treatment is to be pursued ? I will not discuss the opportunity for direct intervention, for thoracentesis is evidently not indicated. We will then, on the one hand, attempt to moderate the violence of the inflammation, and on the other, sustain the strength of the patient.

To fulfill the first indication we apply successive flying blisters to the affected side.

To respond to the exigencies of the second, we administer tonics, soft extract of cinchona, brandy and the more generous wines. Need we have recourse to any form of antiseptic medication? The use of antiseptic preparations and simple or aromatic fumigations is undoubtedly rational, but has as yet hardly received the sanction of practical clinicians.

Note.—To complete this lecture and observation it may be added that the patient submitted to the treatment above indicated ; after several attacks of purulent expectoration, the quantity discharged being each time lessened, finally recovered completely, and left the hospital on April 14th, in excellent health.

COMMUNICATIONS.

INTRODUCTION TO STUDIES IN CLINICAL GYNECOLOGY.

BY PROF. A. J. C. SKENE,
Of Brooklyn, N. Y.

The fact should be clearly kept in mind that a knowledge of the science of medicine does not give skill in the art of practice, however much it may help one to learn it.

Men profoundly versed in the science of medicine may be poor practitioners, and men whose knowledge of the science is very limited may attain some reputation in practice. The best qualified physician is the one who knows most of both the science and the art. The subject for consideration to-day is the methods of investigation to be adopted in practicing the art of gynecology. Before beginning the actual work of examining patients it is necessary to know how to do so.

There are several methods of investigating the sick and injured, given in text-books and taught by professors, but most of these are better adapted to general practice than to special departments of medicine.

The methods which I desire to teach you are circumscribed, and perhaps less complicated because they are limited to the diseases peculiar to women.

In examining patients you must first settle definitely in your minds the object to be attained and how to attain it. Some rational system of investigation should be mastered in all its details before undertaking actual practice. To engage in clinical study without such preparation is like trying to read a language without knowing its alphabet.

First obtain all the facts of the case in hand; secondly, arrange the facts in their natural relation to each other; and finally, make deductions from the data obtained.

These will be easily remembered in the following order and association: observation, classification of things observed, and conditions indicated by the sum of the information obtained.

I desire to urge you to give special attention to the art of observation, because it is often neglected by teachers and students. The systematic way in which facts are presented in books and oral lessons enables the student to acquire the habit of classification in all branches of learning. The mental training obtained in the study of mathematics and logic prepares men to make reasonable deductions from the facts in science; but I know of no school in which thorough training is given in the art of observation. It is because of this defect in preliminary education and in learning clinical medicine, that practitioners are led into error sometimes, in making diagnosis. They fail to observe all the facts, and hence their deductions are liable to be incorrect.

One who misses a page here and there, in reading a book, is in constant danger of misunderstanding the author. The examination of a patient should begin by a general inspection; and in order to make that inquiry complete and profitable, certain questions should be raised in the mind of the examiner; such, for example, as what is the general appearance of the patient under observation? What size? Regular or defective in general outline? Lean or corpulent? What temperament? Is the face pale or flushed? Languid or vigorous? Sad or cheerful? Calm or excited? Intelligent or stupid? What diathesis is indicated, if any? In short, does the general physiognomy indicate health or disease.

All these interrogations are made by looking inquiringly at the patient. There are so many questions to be answered in this connection, that you may find some difficulty in promptly remembering them; but by patient practice you can train your mind and eyes so that you can take advantage of a rule of observation employed by critical investigators, which is this: having a type of a normal organization in mind, you can scan a given case, and detect any deviation from the standard of healthy formation and appearance. The artist, in looking at a picture or statue, does not necessarily question every line of the drawing or form by itself, but his trained eye catches any defects that there may be in the work before him.

Just here a brief reference may be made to arrangement of the information obtained by an examination.

The classification of facts is simply putting together those which are similar in character. The arrangement of material things in groups is familiar to all of you. A well arranged library, in which all books pertaining to a given subject are placed side by side, is a fair illustration of this kind of classification. Facts and ideas can be arranged in the mind upon precisely the same principles. The advantage of classification is that it aids comprehension and memory. By recalling one of a group of facts which have been associated in the mind, the rest will follow in easy and natural order. There are two methods of classifying the points in the clinical history of a patient. One

is to obtain all the information possible, and then arrange it in order. The other is to classify the facts obtained at each step of the examination. The former method requires a mental grasp and tenacity which few possess, and therefore I would advise you to adopt the latter.

The information obtained by inspection may be classed under four heads: *First.* The original character of the organization, whether perfect or imperfect in general outline. *Second.* If imperfect, whether by imperfect development, giving lesions of form, lesions of structure from inherited or acquired disease, and inherited tendencies to disease, known as diathesis. *Third.* Evidences of disease, expressed in the face, either acute or chronic, and of what class. *Fourth.* The temperament, which simply means the preponderance of a certain portion or portions of the organization. It is quite important to be able to recognize the temperament of each patient, as it has a bearing upon the tendencies to disease. The term temperament is an unfortunate one, because it does not give any idea of the meaning implied; but long use has given it claims which cannot be easily set aside. I have observed that students often fail to clearly comprehend the use of the term in clinical medicine. Hence, a brief explanation may be profitable.

You are aware that in describing the human organization, it is divided into four sections, or systems, the nutritive, circulatory, nervous, and muscular, which includes the osseous structures. Now, when either of these systems predominates in extent of development in a given person, we say that he or she possesses that temperament. There are, therefore, four temperaments, viz., the *muscular* (called bilious), the *nutritive* (called lymphatic or phlegmatic), the *sanguine*, and *nervous*.

In a uniform and well developed organization neither system predominates. They all exist in normal proportions. Examples of this well balanced type of organization are said to have been presented by such men as Washington and Franklin. We have at present no suitable term to designate such organization, in which all parts are equal in development. Such a condition represents a typical union of all the temperaments; the highest order of normal development. Two of these systems may predominate, which gives what may be called a compound temperament. For example: the nervous and circulatory systems being more developed than the rest of the body would give the sanguine-nervous temperament. And so by the combination of two of any of the systems the other compound temperaments are formed.

A few examples of what may be accomplished by inspection will tend to fix in the memory what has been said upon this subject. Suppose a patient appears to be about the average size, well formed, full in flesh, small bones, fair hair, blue eyes, pale face and lips, and facial expression of weariness and discomfort. These conditions would indicate the phlegmatic temperament, and, perhaps, the strumous diathesis, anæmia, mental discomfort and want of general strength. Take another patient, tall, and spare in flesh, large bones and muscles, large brain, dark hair, and sallow, dry skin; the face expresses suffering and an excited, restless condition; these characteristics indicate the nervous-bilious temperament, faulty nutrition, probably from some organic disease which gave rise to physical suffering.

To illustrate still further the value of this process of general inspection of patients, let me state the partial history of a case seen in private practice. A lady called to consult me regarding her son, a little fellow seven years of age. After a very brief survey of the patient I informed his mother that he had recently had scarlatina, and that within a few days his feet had been swollen; that his urine was scanty and of a peculiar dark color, as if mixed with soot. I also stated that when a child he had suffered from sore eyes, and when an infant he had snuffles, and that his father had been subject to rheumatic pains in years gone by. All this was told to the mother before asking her any questions and before examining the patient further than to look at him. She acknowledged that I was right in every particular, and expressed surprise that I should know so much of one whom I had never seen or heard of. In the estimation of my client I had established a reputation upon which an enterprising character could have made a fortune. When I told her how I made these discoveries, she at once understood that it was simply a matter of clinical observation. A glance at the boy showed that exfoliation of the cuticle, which occurs after scarlatina, was still going on; the face was pale and puffy, indicating commencing dropsy from acute nephritis, a sequel of the eruptive fever. I also noticed that he had a delicate scar upon the cornea of each eye, the result of a former keratitis. The form of his nose and the character of his teeth indicated an inherited syphilis, and from the appearance of his mother and other facts in sociology I presumed that the father was the one who transmitted the specific disease.

EVIDENCE OBTAINED FROM PATIENT'S TESTIMONY.

The *age* of the patient should be ascertained, because that suggests the possible existence of the diseases which are likely to occur at certain periods of life. Care should be taken to compare the real and apparent age, in order to tell if the patient is prematurely old or well preserved. This interrogation will also serve to keep in mind the fact that, in early life, acute diseases prevail, while degenerations are usually limited to advanced life.

It is important to know the social relations of a patient—that is, whether she is married or single. If married, she is liable to the diseases and accidents attendant upon child bearing. A married woman who has never been pregnant, suggests that she is possibly sterile, either from choice or because of some defect in her organization. Single women ought to be limited in the range of diseases of the sexual organs, and we may take it for granted that they are until we obtain evidence to the contrary.

Having made a general inspection of a given case, and learned the age and social relations, an examination of the various portions of the body should be made, in systematic order. To do this conveniently, one group of organs should be examined at a time. This group of organs constitute the various systems, classified as follows:—

THE NERVOUS, NUTRITIVE, MUSCULAR, AND SEXUAL SYSTEMS.

The first three are subdivided as follows: The nervous has two grand divisions, the cerebro-spinal and organic. The nutritive has four subdivisions, the digestive, circulatory, lymphatic and excretory, and the third has the osseous and muscular.

The present purpose is to outline the methods of investigating the sexual system, but in order to do that successfully, it is necessary to be able to examine the whole body. No one can be a trustworthy specialist without having a thorough knowledge of the whole organization. All the parts of the body are so bound together by mutual relations that one cannot accurately diagnosticate the diseases of one portion without knowing the condition of all the others. On account of that fact I must refer to the principles upon which the examination is made of parts other than the sexual system.

Briefly, it may be stated that the two principal subjects of inquiry are the condition of the function and structure of the organs under examination. Perverted function of the cerebro-spinal division of the nervous system is manifested through derangements of sensation and motion, and abnormal states of the organic nerves is indicated where nutrition is deranged, while the organs of nutrition are free from organic disease. The condition of the circulatory system is indicated by the color of the skin and mucous membrane; the character of the pulse and the heart sounds.

General nutrition may be estimated by the appetite for food, the excretions and the state of the flesh generally. These are meagre hints, but if you keep them in mind while examining cases in the department of gynecology, you will guard against overlooking affections of the general system which might modify or cause diseases of the sexual system.

In applying the principles (already hinted at) in the investigation of special diseases of the sexual organs, we find that morbid action is manifested by symptoms and physical signs. The symptoms may be classed under three heads. First, deranged nerve action; Second, deranged functions of the organs affected; and, Third, modified muscular motions.

The First Class (Nerve symptoms). Pelvic pains not specially localized; sacral pain; pain of special pelvic organs; pains beginning in the pelvis and radiating to other parts of the body.

Second Class.—Derangements of function; state of the functions; deranged menstruation; sterility; abnormal discharges; deranged function of the bladder and rectum.

Third Class.—Aggravation of any or all the above named symptoms, by standing, walking, or any other muscular exercise.

Keeping this classification in mind will suggest questions, the answers to which will determine the presence or absence of these symptoms. You should know the symptoms which belong to a given case, and then ascertain if they are present by asking the patient questions. You will more surely obtain correct testimony in that way than to depend upon voluntary statements made by the person examined.

The following will aid you in understanding the way to detect the symptoms referred to in the three classes given above. First ask if the patient has pain and where it is located. Ascertain also if this is pain connected with any of the functions of the pelvic organs. Then obtain the history of the functions of the sexual organs, in the past and present. These facts can be obtained from the patient herself, aided, perhaps, by some one who knows her well. Some practice is necessary to give skill in taking testimony, the value of which depends largely upon the physician's

ability to make the patient answer his questions correctly. Such questions as the following regarding the menstrual function should be asked. At what age was the menstrual function first established? At what periods of time has it recurred? How long does it continue each time? What is the quantity and character of the flow?

Is it attended with pain, and if so, where is the pain located, and the time it occurs in relation to the menstrual flow? Has menstruation always been attended with pain, or only for a limited period in the history of that function? And, finally, is menstruation attended with derangements of any of the other functions of the body?

From the answers to these questions two points can be decided. First. Whether menstruation has been performed normally during the whole, or part of the patient's menstrual period of life, and Secondly. If any derangement of that function exists, whether it be in character, recurrence, duration or quantity.

Next in order comes the history of reproduction. Has the patient had children, and if so, how many and when? Has she miscarried? If she has, at what period of gestation, and at what time in relation to birth of living children if she has had any? Was there anything abnormal in her pregnancies, confinement, or recovery from labor; if so, what? The answers to these questions will show whether the present conditions date back to some of the diseases or accidents of pregnancy or parturition. If the history so far obtained indicates any disease or functional derangement of the sexual organs, and there is any accompanying affection of the general system, the question arises, regarding the relations which they sustain to each other. That question can frequently be settled by ascertaining which of the two affections, the local or general, appeared first. The one which precedes is frequently the cause of that which follows.

Thus far we have been dealing with symptoms which, as a rule, only reveal derangements of function. They are only expressions of disease, and do not in all cases indicate the conditions of the organization which cause the derangement of function. This brings us to the final division of our subject, viz: Physical signs of disease. These are the physical evidences of changes of structure. There are exceptions to this rule, but they are few in number, and therefore, may be omitted in our general consideration of this subject.

The changes of structure and organization of the sexual organs which are expressed by physical signs are as follows:—

Changes of position, form, size, consistence, composition, color or appearance.

The means of observing physical signs, are by the touch, single or bimanual; speculum, sound and curette, percussion, palpation, exploring needle, uterine dilators.

The art of employing these means, and the significance of the signs obtained thereby, can only be taught by actual cases presented in the clinic for diagnosis.

Hospital Reports.

BELLEVUE HOSPITAL, NEW YORK.

CLINIC OF AUSTIN FLINT, M.D.,

Professor of Principles and Practice of Medicine in Bellevue Hospital Medical College, New York.

Carcinoma of the Peritoneum and Pleura(?).

Gentlemen:—The record of this case reads as follows: The patient is a woman, fifty-four years of age, who was admitted to the hospital on the third of this month. She has been a hard-working woman, obliged to support herself by scrubbing, etc.; she has never been in the habit of taking stimulants; the general health good; has been troubled with hemorrhoids and constipation; about two months ago she noticed that her abdomen was beginning to become enlarged, and this enlargement rapidly increased until she was unable to be up and work. She consulted a physician, who drew off about two gallons of fluid from her abdominal cavity, after which he was able to feel a tumor. The abdomen refilled with fluid and became largely distended; her appetite failed, and she has been losing strength for some time. There has been no vomiting; no swelling of the feet or of the face; no cough; there has been shortness of breath; no pain; she is pale, but well nourished; she came into the hospital on account of the abdominal enlargement.

On inspection we see a peculiar bulging of the upper part of the sternum, probably congenital. The percussion note in the left infra-clavicular region is vesiculo-tympanitic; the respiratory and voice sounds are exaggerated. Below, we have all the signs of fluid in the left pleural cavity, rising as high as the level of the fifth dorsal vertebra.

The abdomen is noticed to be considerably enlarged, and there seems to be a slight bulging at the level of the umbilicus. Palpation shows that the abdominal wall is not very thick, not tense, but soft and yielding, and that fluid is present in considerable quantity. There is bulging just to the left of the umbilicus, due to the presence of a hard mass, which is somewhat movable under the hand. There is a second tumor, not quite as large as the first, in the right iliac region, which is also movable, and apparently is not attached to any of the pelvic viscera. Both tumors are firm and resistant, and do not feel like fecal masses. It is always a question, when we find tumors here, whether they may not be due to accumulation of hard, fecal masses in some portion of the

colon. This subject we will soon consider in the didactic course.

Above the level of the fluid there is tympanites. Dullness and tympanites change with the change in position of the patient. On auscultation, a rubbing friction sound is heard as the tumor is moved.

The heart is somewhat displaced to the right. The urine presents no evidence of disease of the kidneys.

The patient has been put upon tonic treatment and good diet.

It is noted that on the fourth, when fluid was withdrawn from the pleural cavity, it contained red globules and budding cells. These signs are to be regarded as diagnostic of carcinomatous disease. As a rule, when we withdraw liquid from the chest, and it contains a little blood which cannot be accounted for by the puncture made, it may be taken as proof, though not absolute, that there is either phthisis or carcinomatous disease.

On the eleventh it is recorded that the patient is now quite comfortable, but at times, however, she is troubled with shortness of breath. The bowels are constipated, but always respond to laxatives. The appetite has not been good; occasionally vomited during the last three days; the abdomen to-day is larger than at the beginning, the enlargement being apparently due to tympanites. The percussion note is tympanitic over the whole of the abdomen, and no evidence of fluid is obtained. On introducing the hypodermic needle failed to get any fluid.

Another specimen of fluid was withdrawn from the left pleural cavity, and submitted to Dr. Welch for microscopical examination. He reports that "the fluid contains a large number of red blood corpuscles, a few pus cells, and a considerable number of oval or round cells, two or four times the size of red blood corpuscles. These large cells occur singly and in groups. They often present the appearance of so-called budding cells, one cell, as it were, springing out of another. The size of these cells, and their occurrence in groups, and as budding cells, renders probable the diagnosis of carcinomatous disease of the affected serous membrane."

Such is Dr. Welch's report, and it is with reference to the diagnosis of carcinoma of the pleura that I wish specially to present the case to you to-day. You will remember that at a previous clinic I gave the details of a case in private practice, in which there was hydro-peritoneum, and at that time no evidence, on palpation, of carcinomatous disease could be ascertained, but it was suspected, and for the same reason that we should suspect it in this case if we had not found a tumor, namely, absence of the ordinary causes of hydro-peritoneum. There were no evidences of disease of the liver. The habits of the patient, so far as we could judge (and I think we could judge correctly), would exclude the probability of cirrhosis. There was no evidence that the dropsy of the abdomen was preceded by peritonitis, at least, of any degree of acuteness; nor was there anything preceding the ascites to denote renal inflammation.

Here, then, we have an instance, assuming our diagnosis to be correct, of pleurisy dependent upon carcinomatous disease occurring in the chest. There is considerable fluid in the chest, but it has not yet embarrassed the respiration seriously, even though associated, as it is, with tympanites and a certain amount of liquid in the peritoneal cavity. But if at any time further accumulation of liquid in either of the two cavities should render the respiration very difficult, it will be proper to remove some of the liquid by aspiration. At present, however, the two indications evidently are to sustain and invigorate the patient by tonic remedies and by good, nutritious diet.

Bronchitis.

I may state, gentlemen, that the case, which I presented to you at a former clinic, of bronchitis affecting the smaller sized tubes (though not extending sufficiently, perhaps, to constitute capillary bronchitis), associated with collapse of the lobules or lobular pneumonia, has been improving progressively, and the patient is now in a comfortable condition. The physical signs which denoted circumscribed solidification of the lung have, as I learn, disappeared. You may also recollect the patient presented some time ago, who had anæmia and functional disturbance of the heart, and was confined to the bed. She is now able to assist the nurse about the wards.

Bright's Disease.

I will now present you two patients with chronic Bright's disease of the kidneys. I have not during this session been able to present you cases well illustrating all the varieties of this disease. Besides the general division into acute and chronic renal disease, we have different kinds of the chronic form, and among these, I may mention, first, the large white kidney, combined often with the waxy, which presents a certain group of symptoms. I do not think I have yet been able to show you a good typical case of this variety; that is, a patient with a large amount of anasarca, marked pallor of countenance, the urine loaded with albumen, and so on. The acute form of Bright's disease, when it becomes chronic, presents this variety; it also follows scarlet fever, and exposure with intoxication.

Then there is the waxy form of kidney, the diagnosis of which we can form from the antecedent history—prolonged suppuration from some part of the body, disease of the bones, syphilis, sometimes phthisis; and sometimes there is evidence of waxy disease affecting other organs, as the liver, the spleen, and sometimes the intestines. The anasarca in this variety is considerably less than in the former, sometimes it is entirely wanting: the progress of the affection also is frequently very slow, the urine is abundant, of low specific gravity, and contains a small amount of albumen and hyaline casts. These are points involved in the diagnosis.

The other variety is the fibroid, the cirrhotic or contracted kidney, and it has so happened that our cases, so far, have been in illustration of this form. This form is of special interest in this respect, that is often overlooked, the ordinary symptoms and signs of Bright's disease, perhaps, being wanting for a good while, the first evidence being, perhaps, the sudden development of some important sequelæ, or complication. There may be entire

absence of general dropsy; examination of the urine may show only a trace of albumen, or none whatever; and if we are content with a cursory examination of the urine, we may reach the erroneous conclusion that there is nothing in it denoting this disease. This happens over and over again, the examination of the urine not being sufficiently minute. The quantity should be well ascertained. The specific gravity should never be overlooked, and the examination by the microscope in these cases is often of considerable importance.

With regard to the usual complications of this form of Bright's disease, they belong among the uræmic manifestations, and are supposed to be due to retention in the blood of urea. It is a question, however, whether other principles are not also retained, or whether it is the urea alone which causes the toxical effects. However that may be, it is in consequence of the retention in the blood of matters which should be eliminated, that we have the manifestations of uræmia. Of these symptoms I make this division, namely, into the minor and graver, and I think it is a practical and useful one. The minor manifestations are very important to us in practice, as leading us to suspect, in given cases, the existence of Bright's disease. They are, pain in the head. or cephalalgia, nausea, vomiting, diarrhœa not otherwise explained, impaired vision. Over and over again patients have gone to the oculist for disease of the eye, and on examination, the oculist, knowing about the dependence of disturbed vision upon disease of the kidney, in certain cases, has made the diagnosis of Bright's disease. Cramps in the limbs may be mentioned in this connection.

Now and then the graver manifestations of uræmia are the first to attract attention—coma, convulsions, sometimes occurring suddenly, sometimes not. The minor usually precede the graver manifestations, but not always. Bear in mind that fact. Now and then a patient may appear in his usual health, be about his affairs, when suddenly he drops down in the street, unconscious, in a state of coma, sometimes with convulsions.

Now, when we examine a patient, and find these minor uræmic manifestations present, it is important for us not to overlook their possible or probable significance. I want to make one practical remark here with regard to the examination of the urine. In all cases in which there is any ground whatever for suspecting renal trouble, examine the urine, and examine it with care. I have come more and more to consider it important, in all doubtful cases, to have a sufficiently careful examination of the urine made, either to determine the probable existence of renal disease or to exclude it.

Besides coma and convulsions, there are pericarditis, pleurisy, œdema of the glottis, œdema of the lungs, dyspnœa which is apparently toxical, we being unable to refer it to any appreciable morbid condition of the lungs, and, therefore led to infer that it proceeds from the action of toxical principles in the blood upon that portion of the nervous centre which presides over the respiratory tract. We meet with cases of this sort which are referred to uræmia. Such are the more important of the graver manifestations.

The two patients which I present to-day, gentlemen, happen to be cases illustrating the sudden occurrence of grave uræmic manifestations. That is, assuming the condition of the second patient to be that of Bright's disease and uræmic poisoning.

This patient, a woman, forty six years of age, was presented to you on a former occasion, when I read her history. You will remember that she came from out of town to the city, and here became suddenly unconscious, and was brought to the hospital in that condition. There has been no œdema of the limbs, but examination of the urine showed the existence of renal disease. There has been considerable mental disturbance since her entrance into the hospital. There has been delirium, which is not a very frequent complication of renal disease, but sometimes it is, and is sometimes a very important symptom or complication. I have known violent mania to occur in connection with this variety of Bright's disease. From the time she was presented before until about a month since this case was progressing very well; nothing of any particular importance occurred; but since that time the points are of interest, and I will read the record. She has been passing from fifty to seventy ounces of urine daily, but on the 4th the amount dropped to 34 ounces, and during the night she vomited and complained of nausea. Note the connection between these gastric symptoms and the very considerable and sudden diminution in the quantity of urine eliminated. The next day she still had a good deal of nausea and some vomiting. Bicarbonate of soda in water was given, but it seemed to increase the nausea instead of relieving it. I suppose the alkali was given to diminish the effect of the eliminative matters upon the mucous membrane of the stomach. You will remember that in a former case there occurred almost complete suppression of the urine, and the gastric symptoms became greatly aggravated.

On the 5th the amount of urine passed was 28 ounces; nausea and vomiting continued, and there was dizziness, spots before the eyes, and headache. You will notice the appearance of minor manifestations of uræmia occurring after her admission to the hospital: before that there being none; the first symptom of renal disease showing itself in unconsciousness

She has been taking the infusion of digitalis three times a day, and later every three hours. There is still no œdema in any part of the body. A tenth of a grain of elaterium was given, and again repeated, but it had no effect. This, I am sorry to say, is frequently the case with this drug, that it is variable in its strength, and we are liable to get negative results. Infusion of digitalis, liquor ammonia, and spirits of nitre were then given, and during the day 27 ounces of urine were passed. She was then given a mixture which contained jaborandi, and this had the effect of producing diaphoresis. You are aware that one of the means of eliminating urea vicariously is by the skin, and measures to accomplish this are important. We can use various external methods to produce sweating, but jaborandi is a remedy which sometimes has a remarkable effect in that

direction. As far as my experience goes, however, its good effects in cases like this have not been fully met. Notwithstanding she perspired freely, the symptoms were not much relieved. On the 9th the compound jalap powder was given, but it did not move the bowels. I have often found that this, in some cases very efficient hydragogue cathartic, the pulvis purgans, fails to act, so that I have hesitated to employ it in urgent cases, cases in which it is very important to have drugs that can be relied upon. At 9 P. M. on the 9th the mixture of digitalis was stopped, and one-tenth of a grain of elaterium was administered. At 12 P. M. the specific gravity of the urine was 1.016, and she passed only 10 ounces; but the amount was not very accurately measured. On the 10th she had several very large movements of the bowels, the elaterium seeming to have taken effect. A solution of morphine was administered hypodermically, to relieve pain, and she received a stimulant. During the past twenty-four hours she passed 46 ounces of urine; free from nausea and dizziness. During the next twenty-four hours the amount of urine passed was 28 ounces, of a specific gravity of 1.010; contained no albumen.

The points of instruction in this case, gentlemen, are these: Here is a patient who was admitted into the hospital, having been suddenly attacked, without any known previous symptoms pointing to any important disease, with coma and convulsions. Examination of the urine showed unmistakably disease of the kidneys, and of that variety of chronic Bright's disease known under the several names of small, contracted, cirrhotic, fibroid, gouty kidney. She improved in the hospital, until suddenly, without any apparent reason, the urine dropped down from an increase in quantity to a smaller quantity, and coincident with this we had minor manifestations of uræmia, especially nausea and vomiting. Then the object of the treatment was to forestall the occurrence of the common and graver manifestations of Bright's disease.

Now, that is the problem which is presented to us frequently in practice, and in order that we may do that, it is important for us to ascertain, by proper examination, the fact of the existence of this form of Bright's disease. You see difficulties exemplified in this case which we meet with in practice. The stomach was not very tolerant of remedies. Elaterium was employed, but at first seemed to be ineffectual. Pulvis purgans, and other hydragogues, either from defect in the drug itself, or from some condition of the patient, proved unsuccessful in this case. Finally elaterium was repeated, and it then proved successful, copious watery discharges being produced, and then the minor symptoms which we had a right to conclude might foreshadow graver ones were temporarily removed; so far, then, this case affords us instruction, and its subsequent course may develop other points which may be interesting and useful for us to consider.

The other patient whom I shall present to you was also taken suddenly with coma and brought to the hospital in that condition. The urine gave some evidence, not much, of renal disease. It was found to be very small in quantity, and it was then concluded that the coma, and also convulsions which she had, were due probably to uræmia. She improved, but after a time the urine again became greatly diminished in quantity, approaching even to suppression, and there came on intense gastric irritation, and you will remember that I presented that patient to you a second time with reference to that complication of renal trouble. The stomach was intolerant of everything, and it was necessary to sustain the patient by rectal alimentation for some time.

Now, the problem in this case was, had we sufficient evidence on which to make a diagnosis of disease of the kidneys. The evidence was rather small; I mean evidence afforded by examination of the urine. There was sometimes found, but by no means constantly, traces of albumen, and two or three casts were also found. These facts, together with that of almost total suppression of urine, led me to suppose that this was a case of uræmic convulsions, probably due to renal disease.

It is noted that on the 3d instant the patient feels more comfortable; the stomach retained beef juice and milk; 17 ounces of urine, specific gravity 1.026, amber colored, acid, contains no albumen. Although the amount of urine passed was small, you will notice that the specific gravity was high, and this is an important fact. The quantity of the urine and its specific gravity should always be considered together.

On the 4th she felt well, passed 26 ounces of urine, amber colored, turbid, specific gravity 1.020, acid, no albumen. Notice that with this increase in the quantity of urine the stomach is able to retain liquids. On the 8th it is noted that she has been steadily improving, the quantity of urine increasing, being on the 6th 45, on the 7th 25, the 8th 32, on the 9th 40, and on the 10th 60 ounces. It contains no albumen; specific gravity about normal. She sits up all day, and feels well.

Such, gentlemen, are the facts in this case. Had the patient, before developing more plainly uræmic symptoms, come to you in private practice, it is altogether probable that on examining the urine and finding it to be, as it has been in this case, almost or quite free from albumen, you would say at once that there was no disease of the kidneys; yet you see the progress of this case has been such as to point, without much doubt, to the existence of renal disease. The occurrence of coma, along with the great diminution in the quantity of the urine, and the uræmic manifestations in connection with the digestive organs, make it difficult for us to conclude that the kidneys are free from lesion.

Medical Societies.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated meeting, May 4th, 1883. The President, Dr. E. L. Duer, in the chair.

Dr. Boardman Reed, of Atlantic City, New Jersey, remarked that the questions of most interest with regard to

Icterus Neonatorum

are its etiology and pathology, and its relations to

umbilical hemorrhage and purpura. As to the first of these points, we can arrive at satisfactory conclusions only after an extended series of autopsies, such as it is rarely or never the privilege of the physician in private practice to see. The wards of lying-in hospitals ought to afford the needed data to determine finally whether jaundice in the new-born originates in the liver or in the blood. A sufficient number of thorough post-mortem examinations do not seem to have yet been made to set this question at rest, hence, we find a variety of theories maintained.

The theory advanced in many of the older books is that the retained meconium forms an obstruction to the escape of the bile. This does not seem to have been confirmed by post-mortem examinations, and is improbable, from the fact that icterus usually does not develop in infants until several days after birth, and after there have been numerous fecal evacuations.

Some of the German authorities consider that icterus neonatorum is probably due to lowering of the blood pressure in the hepatic capillaries, in consequence of the cessation of the blood stream passing directly from the umbilical veins into the portal vein. This at first appears plausible, since experiments upon animals, conducted by Heidenhain and Lichtheim prove that lowering the blood pressure in the liver, as by starvation, or by establishing a biliary fistule, may cause all the phenomena of jaundice. But as this change in the circulation must take place in every infant immediately after birth, we should expect jaundice to be universal in the new-born, and to come on always within a day or two after birth; whereas, it affects a very small proportion of the whole number of children born, and is generally developed between the third and tenth days.

It seems more probable to me that jaundice in the new-born (excluding the transient yellowish discoloration due to the natural fading of the rosy color first seen in healthy infants) may arise from at least two wholly different causes, and is, therefore, divisible into two classes, one obstructive or hepatogenous, and the other of hemic origin or hematogenous. The first we have reason to believe originates most frequently, as in adults, from a catarrh of the duodenum or bile ducts, which we might expect, *á priori*, to result during the first week of life, from the ablutions to which many infants are subjected under circumstances that render the taking of cold almost unavoidable before a tolerance has become established.

That exposure to cold is one frequent factor in producing the disease, is well known. It is recorded by West that in the Dublin Lying-in Hospital, where the hygienic conditions are excellent, infantile jaundice is very rare; while in the Foundling Hospital, at Paris, few infants escape it; nearly all the abandoned little waifs being exposed to cold before admission.

It is doubtless true that jaundice dependent upon persistent obstruction, occlusion, or congenital absence of the bile ducts, instances of which have been observed in infants, may go on to the production of profound blood changes and be complicated with hemorrhage as a consequence, from the umbilicus or mucous surface; but I am disposed to maintain that many of the grave cases associated with such hemorrhages are of hemic origin. The reasons for this view are (1) The constantly observed fact that the most intense forms of obstructive infantile jaundice are often accompanied by light stools and high-colored urine, and yet unaccompanied by any tendency to hemorrhage. Several of my cases exemplify this fact, and notably, the one hereinafter reported, of a child born with measles and shortly afterward developing jaundice. Every practitioner must see many cases of severe, yet uncomplicated jaundice. On the other hand, persistent and fatal hemorrhage now and then occurs in cases where the jaundice is only slight. Many such are on record; nor can it be assumed that the connection is only accidental, as the statistics, to be cited further on, abundantly establish a causal relation between jaundice and hemorrhage. (2) The fact that these hemorrhagic cases associated with slight jaundice do not usually present any marked evidence of obstruction to the flow of bile; such as constipation, white stools, etc. (3) The fact that they occur frequently under conditions, such as immaturity and feebleness at time of birth, which have no obvious connection with hepatic obstruction, but are most likely to be dependent upon an inheritance of poor blood from the maternal system, or of digestive and assimilative powers so weak that the elaboration of healthy blood by the infant organism is impossible.

These reasons, I submit, render still tenable the theory that infantile jaundice may have other than a hepatic origin.

The relations of icterus neonatorum with the hemorrhagic condition manifested most often by bleeding from the umbilicus is a subject of much interest and practical importance, concerning which the profession is in need of more exact information. That there is often a dependence one upon the other is certain. Among two hundred cases of spontaneous umbilical hemorrhage which have been reported, including two of my own, jaundice was observed in seventy. It probably existed in a slight degree in a much larger proportion, not being considered of sufficient importance to report; but even the above recorded ratio of more than one in three is sufficient to prove a causal relation, since in any unselected two hundred births we should not expect to have more than ten or fifteen cases of jaundice, instead of the enormous number of seventy.

Spontaneous umbilical hemorrhage is so rare that many physicians of extensive experience have never seen it. West, in the first edition, gives a better description of it than most recent writers on diseases of children. He emphasized particularly the fact that it may depend upon a grave form of jaundice, but states that he had never met with a case of it.

This complication being so rare, I shall not apologize for briefly summarizing here a report of an interesting case of it, seen two and a half years ago, in Atlantic City.

Case 1.—A female child, born two weeks, at least, before term; weight about six pounds. The mother had suffered at times, for years, from anæmia, palpitation of the heart and various hysterical symptoms. During the pregnancy she

had nausea almost constantly, due to disease of the cervix. Vomiting was so severe and frequent toward the close of the period that her health was greatly impaired by it. I was on the point of applying nitrate of silver to the cervix when, after a number of uterine hemorrhages, extending over a week, labor came on and the child was speedily born. The father was even more delicate than the mother, having chronic dyspepsia, periodical sick headache and nervous exhaustion.

After the delivery the cord was secured with a double ligature, and there was nothing abnormal until the fourth day, when the compress over the umbilicus was found saturated with blood, which oozed from all parts of the softening funis. Numerous powerful styptics were applied, with only temporary good results, the bleeding, though checked for a time, always recurring after the lapse of a few hours. Dr. W. H. Bennett was called in consultation, and the day after the hemorrhage began hare-lip-pins were inserted through the tissues beneath the umbilicus, and the mass ligated. This greatly diminished the bleeding, and the following day the ligatures were tightened, with the effect of finally stopping it. Ergot and tincture of the chloride of iron were administered in very small doses, with a view to modifying the hemorrhagic diathesis which evidently existed. Before the hemorrhage was controlled spots of purpura appeared on the forehead and other parts, jaundice developed shortly after the bleeding began and became marked enough to be noteworthy, but was at no time intense; the stools continued unchanged in appearance, with a tendency to diarrhœa rather than to constipation. The mother having no milk, the child was fed artificially from birth. Shortly after the hemorrhage ceased a volunteer wet-nurse suckled the child for several days, with manifest advantage. When artificial feeding was resumed diarrhœa set in and became troublesome; appropriate treatment and a change from cow's to condensed milk checked the bowels, but the child failed steadily, nutrition evidently being irreparably damaged, and some icterus persisted until the seventeenth day, when it died. No autopsy was permitted.

As an interesting supplement to this report, I may add that a few months ago another child was born to the same parents, and has the following history: It was a male, and somewhat larger at birth than its predecessor. On the second day there was some oozing from the funis, in spite of two ligatures most carefully applied, but this was so readily controlled that it would scarcely have received a second thought, except for the serious hemorrhage in the previous child. As showing the feeble and neurotic constitution bequeathed to these children, it may be mentioned that this infant had a convulsion on the second day after birth, and has had similar seizures at frequent intervals since. It has shown no jaundice at any time.

As a striking example of hepatogenous jaundice in the new-born, the following report is introduced:—

Case 2.—The mother, while pregnant, contracted measles in a severe form; the rash, after being out well, retroceded; pneumonia then developed and she then aborted, some two or three weeks before term. The child, which was of fair size, weighing upward of seven pounds, was covered with a faint rash at time of birth, and within a day or two presented the usual symptoms of the exanthem, including the catarrh, though the fever was slight. By the fourth day its skin began to turn yellow, and there was rapidly developed a very intense form of jaundice, the color, at one time, becoming almost olive green. There was constipation, with one hard, white, putty like stool daily, urine high-colored, staining the napkins. The liver seemed abnormally small; the region of dullness on percussion measuring about one and a half inches in the mammary, and one inch in the axillary lines. The child was fed first with diluted cow's milk and later with condensed milk. I saw the case on the ninth day from birth. Jaundice was then very marked, the hue being of a greenish yellow; but there had been no hemorrhage, either from the umbilicus or any other part. The child manifesting considerable appetite, apparently fair digestion, I ventured the opinion that it might possibly survive, though an unfavorable prognosis had previously been given. It recovered gradually from the jaundice, which lasted in all some twelve days, but has since suffered severely from indigestion and is not thriving well.

Careful microscopical examinations of the blood taken from a large number of infants affected with icterus in its various forms would shed much light upon the subject; but I cannot learn that any systematic observations of the kind have been made. I regret that such an examination was not made in any of my cases; an omission to be expected of a busy physician in private practice, but one which our friends the internes in the lying-in wards of the hospitals ought not to make, amply supplied, as they usually are, with all the necessary appliances, and with authority to institute any necessary scientific investigations.

Dr. Henry Beates, Jr., Physician to the Sheltering Arms Hospital, Philadelphia, has kindly furnished me with the following notes of cases recently seen by him:—

"Having in my ward a large, plump, finely developed infant, presenting the characteristic manifestations of the so call icterus neonatorum, I submitted a drop of its blood to microscopical examination.

"The tendency to the formation of rouleaux was characteristically healthy. The corpuscles have the normal relationship of white to red. The only noticeable feature constituting what might be considered an etiological factor of this affection is a greater number of disentegrated red corpuscles and free protoplasmic nuclei. These, however, were very slightly in excess of that commonly seen under ordinary circumstances, and not sufficient, in my mind, to satisfactorily account for the intensity of the discoloration. Other symptoms of jaundice, like involvement of conjunctivæ, pigmentary discolorations by the urine, light stools, etc., were, and are positively negative. I desire to especially direct attention to the fact that this infant is well nourished and plump.

"Another case, in fact, two, presenting the same phenomena, and under the same conditions

of good nourishment, I might say plethora, have occurred recently in private practice.

"Another child in my ward, when a little less than eight days old, also presented the phenomena of icterus, but mark the contrast. The child was small, thin, and poorly nourished; its expression was one of suffering; its bottle was not eagerly sought, and vomiting frequently occurred. The bowels were constipated, and presented the peculiar clay-colored stool, and the urine stained every thing with the characteristic yellow; the conjunctivæ were also involved. After a period of two or three weeks the icterus had faded and the child is now thriving well. This is an instance of true jaundice (catarrhal) and presents features affording an opportunity of comparison with the discoloration of cutaneous hyperæmia seen almost as frequently as we see what might be termed plethoric babies."

Dr. Julius Kammerer, of Philadelphia, having spoken to me of some remarkable cases of icterus, I asked him to summarize his experience in a note, which is here appended.

"There have been cases under my observation, where the jaundice of children coincided with and was dependent on an ulceration and noncicatrized state of the navel. This cause of jaundice was so clearly demonstrated that in the autopsy of fatal cases there were found phlebitis of the umbilical vessels, extending sometimes to the portal vein, and even small abscesses in the parenchyma of the liver. In every case of icterus of the new-born, I have made it a rule to examine the navel, looking for signs of inflammation or ulceration, as the prognosis, in case of their existence, would be less favorable than in cases of catarrh or mechanical obstruction of the biliary ducts. I have seen some of these cases end fatally by spread of the inflammation to the umbilical veins or by a putrid condition of the blood subsequent to the absorption of purulent and putrid matter."

These observations of Dr. Kammerer's were partially made at the Paris Foundling Hospital, during his studies in that city, and seem to me highly important. His note was not received until after the completion of this paper, and on the eve of this meeting, else the views it embodies would have received full consideration in that portion of this paper devoted to the discussion of the etiology of infantile jaundice. It is confirmatory of my opinion that such discoloration may be hematogenous and often associated with disease of the umbilicus.

I have notes of many other cases of simple jaundice in young infants, but they would exemplify nothing more than is shown by the foregoing reports. As already intimated, the subject needs further investigation, but clinical study simply will not afford the light required. The revelations of the dead-house and the microscope, carefully and scientifically observed, can alone determine positively the points in dispute.

COLLEGE OF PHYSICIANS.

Dr. Geo. C. Harlan, Surgeon to Wills Eye Hospital and the Eye and Ear Department of the Pennsylvania Hospital, read a paper before the College of Physicians of Philadelphia, April 5th, 1882, entitled

Two Cases of Congenital Irideremia, with Lamellar Cataract in one and Dislocated Cataractous Lenses in the other.

Case 1.—N. J. M., aged 12 years, says that he knows of no defect in the eyes of any other member of his family in this or preceding generations, except that his mother is "short-sighted." He is of medium size, and, except his eyes, well developed.

His vision is $\frac{8}{\infty}$ and is not improved by glasses or the stenopaic hole. There is no photophobia, and he sees better in a bright light than in a subdued one. The corneæ are clear, but perhaps very slightly below the normal size, though a constant and decided nystagmus makes it impossible to measure them accurately. The eyes are free from irritation, and their tension is normal. There is not a vestige of iris in either eye. There is well marked lamellar cataract in both eyes. In each lens there are two opaque layers with clear lens matter intervening between them, beautifully seen by oblique illumination. Only occasional and partial glimpses of the fundus can be obtained, but the choroid seems normal. There is not sufficient vision for any satisfactory test of the accommodation.

Case 2.—I. B , a well-grown boy of 13 years; has rather prominent eyes, with full-sized corneæ and normal tension, but the iris is entirely absent in both. In the right eye the cornea is quite clear, and though there are floating opacities in the vitreous, the details of the fundus can be seen fairly well. The lens, which is of normal size, is opaque and white, and is dislocated upward, so that only about its lower half is seen beneath the corneo-sclerotic junction. The ophthalmoscope shows a hypermetropia of $\frac{1}{4}$, which, assuming $+\frac{1}{4}$ to represent the loss of refractive power induced by aphakia in the emmetropic eye, indicates a structure of the ball corresponding to a myopia of $\frac{1}{12}$. The choroid and retina appear normal in structure, but the optic disk is atrophied and greatly distorted, the vertical diameter being twice that of the horizontal, and the retinal vessels crowded to its inner edge; vision is only quantitative. There is no nystagmus.

In the left eye there is a diffused haziness of the cornea, which, together with a greater opacity of the vitreous than in the other eye, makes the details of the fundus invisible. The lens, which presents the same form of cataract as that in the right eye, is still further out of position, and only a narrow edge of its periphery extends below the margin of the sclerotic. The lenses seem to be held in their unnatural position by some attachment of their upper margins, while the lower are free, and they swing backward and forward, as if on hinges, with the movements of the balls. In the left eye the lens has caused an absorption of the tissues against which it rests until the choroid has disappeared from above it and the sclerotic is very much thinned and slightly staphylomatous. When the cone of light concentrated by a convex glass is thrown upon it from below, the outlines of the lens become distinctly visible through the sclerotic.

Though irideremia (iris, and eremia, absence),

or aniridia, is an extremely interesting anatomical curiosity, it can scarcely be said, in the present state of our knowledge, to teach any useful lesson in embryology or pathology. Numerous hypotheses have been suggested to account for its occurrence, but most of them are more fanciful than philosophical, and perhaps none of them are more rational than that maintained long ago by Von Ammon, who, in view of the late appearance of the iris, after the choroid is fully formed, considered its absence as simply the result of an arrest of development of the uveal tract. It is a curious fact that this anomaly is almost invariably symmetrical. According to Manz (Handbuch, Augenheilkunde II, p. 90), but one case has been reported in which it occurred in one eye only. Another point of interest in the history of this defect is its decided tendency to hereditary transmission. A number of cases of inheritance have been reported; one (quoted from Von Ammon by Lawrence) in which one member of the first generation was affected, three of the second, and five of the third.

The fact that cataract is very generally associated with irideremia, has given some support to a suggestion that the iris is concerned in the nourishment of the lens; and to an ingenious theory of the causation of irideremia which supposes that the iris has been crowded out, as it were, by the lens remaining too long and too closely in contact with the cornea during embryonic life. This coincidence of cataract with irideremia is, however, not constant, as cases are recorded in which the lens was transparent. One is reported by Dr. Reuling (*Amer. Journ. Med. Sci.*, January, 1875), in which vision was sufficiently acute to enable the observer to determine that the power of accommodation was unimpaired.

The normal intraocular tension found in cases of iridermia has been adduced to prove that the aqueous humor is not secreted by the iris, but chiefly, if not entirely, by the ciliary processes. In the rabbit the ciliary processes are connected with the iris, and when both are removed, the eye becomes very soft and the aqueous humor is never regenerated (Deutschman, *Grafe Arch.*, v. 26, No. 3). This, so far as it goes, gives support to the advocates of sclerotomy, instead of iridectomy, in glaucoma.

Partial congenital luxations of the lens are usually upward, as in Case 2, and frequently occur without defect of the iris. In the left eye of this patient the lens is so far out of place that it would be entirely concealed if the iris were present, and this case might then be readily mistaken for one of the very rare anomalies of congenital aphakia.

PHILADELPHIA LARYNGOLOGICAL SOCIETY.

Stated meeting, held Friday, February 24th, 1882, at the office of Dr. Bean, 1431 Walnut street, Dr. Harrison Allen in the chair.

Dr. McCracken exhibited a case of tumor of larynx, in a patient, aged 58 years. There were two; one attached to under surface of left vocal cord, and the other at the anterior angle below the cords.

Dr. Bean read a paper on "A Case of Paralysis of the Left Vocal Cord in Adduction Due to Anuerism of the Arch of the Aorta."

During the discussion which followed, Dr. Potsdamer gave a short history of a case of paralysis of right vocal cord, due to pressure of an anuerism of the innominate; the tumor in this case could be seen bulging into the trachea. The patient died from rupture of the walls at this point.

Dr. Sajous related the history of a case of "Vibratory Elongation of the Uvula," where touching of the uvula at any point caused it to move to the opposite side, and to curl upon itself, *i. e.*, if touched on the anterior surface the uvula moved backward, and describing a semicircle, folded itself on to the posterior surface of the soft palate. This peculiar condition had frustrated many attempts to amputate it.

EDITORIAL DEPARTMENT.

PERISCOPE.

On the Treatment of Stricture by Stretching.

Reginald Harrison, F.R.C.S., Surgeon to the Liverpool Royal Infirmary, says, in the *British Medical Journal*:—

If we put aside cases of organic stricture of the urethra which are remedied by the occasional passing of a bougie, there yet remain a certain proportion where such treatment is insufficient. To take an example: a patient having neglected the early indications of stricture, is seized with retention; with difficulty a small catheter is passed, and thus the urgency of his symptoms are met. It often happens that retention recurs, and all the difficulties attendant upon the first catheterism have to be gone over again, with, probably, considerably more spasm superadded. To meet such cases, immediately or remotely, a variety of expedients are practiced. Of these, I may mention continuous dilatation, or the tying of an instrument into the bladder; internal urethrotomy; perineal section; and rupture, as employed by Holt. All these have for their object the passing of a full-sized instrument into the bladder, without which none of them can be regarded as satisfactorily completed.

For some time, I have occasionally been employing for this object a process which I think is best described under the term "stricture-stretching." In using this phrase I do not wish to be understood as advocating the use of either a new instrument, or new treatment. I merely desire to state how I have applied well-recognized principles with equally well known means. Stricture

stretching, as I endeavor to carry it out, is very closely in imitation of the process to which gloves are submitted by the salesman after the purchase has been made. Into each stall of the glove the glove-stretcher is introduced, in order that the fingers may the more readily pass in. If the manipulation be dexterously done, neither are the seams split nor is the kid torn; if clumsily, a rent and a false passage for the finger is the result.

So much for the simile, now for the reality. The stretcher I employ is that much abused but valuable instrument, Holt's dilator; and the stretching is effected quite slowly, by the introduction of successive sizes of dilating rods, until the dimensions required are obtained. All this is to be done at one time, with or without an anæsthetic, according to circumstances. I almost invariably have the patient placed under ether, as it is important that the process should be slow enough to permit of the tissues stretching without tearing. I do not think we fully recognize the extent to which the urethra is capable of being distended. Dr. Otis, of New York, has recently demonstrated the truth of Sir Everard Home's observation: "That the urethra is everywhere much larger than had been supposed, exceeding the size of the largest bougie in use, in a very great degree." And what is true of the healthy urethra will be found to apply, though in a less degree, to the strictured one.

The adaptations in Holt's dilator, specially fitting it for this purpose, may be briefly stated. In the first place, there is attached to it a pilot bougie, which, in cases of tight or tortuous strictures, will be found invaluable. Though the pilot bougie may not be necessary for all cases where stretching is to be employed, yet, as this treatment is intended for some of the worst forms of the affection, it is as well to be prepared for every contingency. If the pilot bougie be not required, a round-top screw takes its place. Then I have increased the number of dilating rods to eight, so that the process of stretching may be gradual; and, in order that there may be no jerking as the several rods are introduced, a spiral spring controls the separation of the two portions of the instrument, instead of a screw.

The size of the dilator, before a rod is introduced, is No. 3, English gauge; the largest dilating rod brings it up to rather over No. 12; so that between these two extremes we have seven gradations in size. If the stricture is so tight as not to be capable of receiving the dilator, dilatation by means of filiform bougies must first be employed until the required size is obtained. Other instruments, divulsors and screw dilators, as they are termed, have been invented for a similar purpose; but all I have seen are open to two objections: 1. They either tear or pinch with their sides the mucous lining of the urethra; 2. They are too large for use, except for strictures of the largest calibre. One of the best divulsors I know of is that adapted by Dr. Samuel Gross, of Philadelphia. It is provided with an index at the handle, which shows precisely the extent to which divulsion has been carried.

A word or two in reference to the use of the instrument I employ for stretching. The patient being placed under ether, in the recumbent position, the dilator, with or without the pilot bougie, is passed fairly into the bladder, and then the rods are slowly and gradually introduced until a full size is obtained. The process generally occupies from ten to thirty minutes, according to the resistance, care being taken not to tear, and so cause hemorrhage. I then withdraw the dilator, and pass a catheter, for the purpose of removing any urine that may be there. I usually give a dose of Fleming's tincture of aconite immediately after the stretching has been practiced, and require the patient to remain in the house for twenty-four hours. A full sized bougie is then passed every third or fourth day, until the patient has learned how to conduct this operation himself, when he must be enjoined to continue this practice.

It will be seen that this proceeding differs essentially from what is so well known as Holt's operation. In the one, the object to be attained is stretching; while in the latter it is rupture. It is the only plan of treatment by which the strictured urethra is at once brought up to a full capacity, without break of tissue.

In conclusion, I would remark that I am not recommending this as a panacea, or as prejudicing other proceedings to which reference has been made; but as a safe and efficient expedient for meeting immediate difficulties, and simplifying future treatment. If, in all cases of retention occurring with tight stricture, the use of this or a similar instrument followed the passing of the catheter, both patient and practitioner would be none the worse for the knowledge that, whatever spasm might temporarily do, at all events there was a way to the bladder which had been made without any structural detriment, capable of admitting a No. 12 bougie. The dilator, as adapted for this purpose, was shown by Messrs. Krohne and Sesemann, in the International Medical and Sanitary Exhibition.

Malignant Disease vs. Syphilis.

In the *British Medical Journal* Dr. Alexander Patterson, of Glasgow, says:—

"Every surgeon, I am sure, reads with pleasure and profit anything from the pen of Mr. Jonathan Hutchinson. In the *Journal*, of March 4th, he refers to the clinical differences in character of malignant disease, according to its seat. Referring to certain cases of cancer of the skin of the trunk, it is stated that, "In all, the ulceration progressed slowly during many years, caused but little pain, and produced no gland disease." Further on: "The disease of which I speak is most intractable, and, as far as I have observed, recurs immediately after removal." Reference is next made to an interesting case, in which Mr. Hutchinson twice removed the ulcer by the knife, and three or four times by caustic, but without benefit. "As soon as the sore was nearly healed it recurred."

May a provincial surgeon be permitted to give a case in many respects parallel? Some years ago, a man aged 45, suffering from epithelial cancer of the scrotum, sent for an eminent surgeon, for the purpose of having it removed. The operation was well performed. No one who saw the case had the slightest misgiving regarding

its nature, but, as a formal matter, the diseased structure was handed to a practiced microscopist in the neighborhood, who stated that it was epithelioma, without doubt. When nearly healed, it recurred, and was removed again, only to begin to spread when almost completely well. A third time it was taken away, with a like result. At the fourth operation, the testicle, which now appeared to be implicated superficially, was removed. When cicatrization was all but perfect, the surgeon left town for his holidays, and shortly afterward the patient's medical attendant requested me to perform the fifth operation, as the disease was spreading again. Having the history of the case before me, in a hopeless, half-hearted sort of way, I cleared away the diseased tissues as carefully and completely as possible with the knife, and watched the healing process with much interest. Matters progressed very favorably until the healing line was reached, when once more the ulceration began. Such conduct in a chimney-sweeper's cancer appeared to me unique. I saw that operating again was useless, and as I stood pondering at the bedside, my eye rested on the shining bald head of the patient. As a random shot, the question was put as to when his hair first came out. He said his hair began to fall soon after he joined the service, more than twenty years ago. The answer gave the clue. Iodide of potassium was prescribed, when the wound rapidly and perfectly healed, and has so remained.

Last year a lady, aged 60, came to consult me regarding an ulcer on the left side of the nose. She had been recommended by her medical attendant, whose card she brought, to see me regarding removal by operation. The sore, she said, began about two years ago, as a small scab or flattened wart, and continued to increase in size, slowly and without pain, since that time. The ulcer was now about five eighths of an inch in length by half-an-inch in breadth, throwing out little discharge, and surrounded by an elevated, clear, glistening border. As she was accompanied by a friend, few questions were asked, and I simply stated that it might be prudent to defer operative interference in the meantime. The patient was given a prescription for tertiary syphilis, requested to use the medicine for six weeks, and then return. She did so, and the sore was completely healed. This was apparently a small rodent ulcer, with a syphilitic origin. We are, probably, yet far from thoroughly understanding the multifarious ramifications of syphilis.

Antiseptic Ligature of Arterial Trunks.

At a recent meeting of the Clinical Society of London, *British Medical Journal*, May 6th, 1882, Dr. Hector C. Cameron, of Glasgow, read notes of all the cases of antiseptic ligature of arteries in their continuity in which he had performed such an operation, whether for aneurism or for accidental wound. The material employed was antiseptic catgut (prepared by one or other of the methods suggested by Mr. Lister), of medium size, and tied in a reef-knot, with sufficient tightness to ensure division of the internal and middle coats of the vessel. Very accurate coaptation of the cutaneous margins of the wound was practiced by stitches of carbolized silk or silkworm gut, with an occasional stitch of thick silver wire, for purposes of relaxation, where that seemed desirable. Free drainage was effected by means of india-rubber drainage tubes in all the cases except one, in which a number of strands of carbolized catgut were employed. The operations, as well as the subsequent dressings, were conducted with rigid antiseptic precautions.

After describing the cases minutely, he said: In these five instances of aneurismal disease, six large arteries were ligatured. In each, complete and permanent occlusion of the vessel was obtained, without any constitutional or local disturbance, without any rise of temperature (if the case of diffuse popliteal aneurism during the first six days be excepted), and without the formation of a single drop of pus. In each case the last dressing was applied respectively on the fourteenth, tenth, eighth, eleventh and twelfth days after the operation; and in each, on the removal of that dressing, the wound was discovered to be thoroughly sound. On similar principles, the radial artery was ligatured four times, the ulnar artery twice, and the popliteal artery once, with equally satisfactory results. In the last case, however, the anterior part of the foot lost its vitality, and ultimately required amputation. The vein, as well as the artery, was injured by the wounding instrument.

Mr. R. Godlee said that in almost all these cases related by Dr. Cameron ligature of the artery was the only possible treatment. It seemed to him now that as treatment of aneurism by digital pressure, the tourniquet, Esmarch's bandages, flexion, etc., was usually very irksome and painful, it might possibly be well to treat all cases at the first by ligature with carbolized catgut, which, as now prepared, kept its hold of the vessel a sufficient length of time to ensure its occlusion.

The President said that Dr. Cameron's experience coincided with his own in so far as this, that the old-fashioned carbolized catgut fulfilled its purpose if properly prepared, and the treatment was thoroughly antiseptic, except in cases where a very long continued pressure of the vessel by the catgut was necessary. But the catgut should be as strong as silk, as soft as the normal tissues; it should be capable of retaining a knot on it with perfect security, and should be free from porosity, so as not to hold organisms in it, as did silk. But, however nearly perfect the ligature might be, there was no use in it unless perfect antiseptic treatment was also adopted, because, otherwise, the outer coat of the artery must die, and suppuration ensue. He believed this was the reason why Dr. Cameron's treatment was so universally successful, he having strongly insisted on the antiseptic treatment in its entirety.

Dr. Cameron, replying to Mr. Godlee, said that Esmarch's bandage had been first tried in the two cases of popliteal aneurism, but the agony was intolerable after some minutes, and each patient could endure no more. The ligature was then used with success. In two cases he had seen no benefit follow pressure, and his surgical colleague, going by his (Dr. Cameron's) experience, had then ligatured the femoral artery in Hunter's canal. When compression was tried, and the collateral circulation thereby established, one might find a second ligature even

necessary, as in one of these two cases, in which the artery was tied in Hunter's canal, when the ligature at the apex of Scarpa's triangle had failed. He believed that as the treatment by the ligature was so free from risk, it was better practice to adopt it at once than to try earlier treatment by these other methods, which were irksome, and interfered with the chances of successful treatment by ligature should it become necessary.

Tracheotomy.

The *Lancet*, April 26th, 1882, says:—

A case related by Dr. Felix Semon, at the last meeting of the Pathological Society of London, presents several points of great importance to physicians and surgeons. But the one to which we wish to direct attention is the fact it illustrates, that a double obstruction of the air passages may exist, and one of them be undetected and unrelieved by operation. In this case there was paralysis of the glottis-openers, and for this tracheotomy was performed, but failed to give relief; and it was subsequently found that a tumor was pressing upon the trachea below the opening in the tube. This tumor was so small that it could not be recognized during life. Other cases of a like nature have been met with, in which a tumor or aneurism has, by direct pressure, and also by implication of the recurrent laryngeal nerves, caused obstruction to respiration, and if an operation has been undertaken in accordance with the view that the laryngeal obstruction is the whole respiratory trouble, only disappointment has resulted. It is impossible in many cases to recognize this condition; the paralysis of the posterior crico-arytenoid muscles quite prevents inspection of the parts below, and in all cases the surgeon is warranted in operating, but should caution his patient that there may be some deeper obstruction to respiration than that which his operation is intended to overcome.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——We have received a copy of the "Addresses at the Inauguration of William Pepper, M.D., as Provost of the University of Pennsylvania." This is a valuable pamphlet, containing, as it does, the history of a very important date in this old institution.

——"Higher Medical Education," a reprint from the Penn Monthly. This is the valedictory address delivered by Professor James Tyson, at the last commencement of the University of Pennsylvania. This address, containing the experience of the University of Pennsylvania in its struggle for higher medical education, and depicting in glowing terms its glorious triumph, is well worthy of perusal by all.

——We have received the Report of the Indiana State Board of Health. With this report we receive a copy of an address, read before the Mitchell (Ind.) District Medical Society, by Thad. M. Stevens, M.D., on the "Essentials of a Law to Regulate the Practice of Medicine in Indiana." It is full of good points, and we sincerely trust that the profession of Indiana will succeed in getting the legislation they desire.

——Ovariotomy, difficulties, diagnostic and operative; continued menstruation, after double ovariotomy. A reprint from the *American Journal of the Medical Sciences*, April, 1882. The author deprecates routine Listerism in this operation, saying, "cleanliness, not carbolic acid, is necessary. Keep sponges clean and warm, but *not* carbolized. Avoid carbolic acid about the peritoneum and open surfaces. Ligatures, sutures and instruments should be clean, but not carbolized."

BOOK NOTICES.

An Index of Comparative Therapeutics; with Tables of Differential Diagnosis, etc. etc. By Samuel O. L. Potter, A.M., M.D. Second edition. pp 280. Chicago: Gross & Delbridge, 1882.

This is an effort to prepare a volume containing the therapeutics of the drugs used by the regular profession, as well as those in use by the homœopaths. Just what practical benefit will be derived from such an exposition we are unable to see. But the book is well prepared, and possesses some interest from a literary and curious standpoint.

Manual of Diseases of the Skin, with an Analysis of eight thousand consecutive cases and a formulary. By L. Duncan Bulkley, A.M., M.D. pp. 312. New York: G. P. Putnam's Sons. 1882.

Dr. Bulkley has well earned the right to be considered an authority on diseases of the skin; and since such diseases have become so very common, it is really necessary for all physicians to have some knowledge of them. Specialists are not to be found everywhere, but skin diseases are, and they are in many cases extremely difficult to cure. This manual will be found extremely useful to every general practitioner.

A Manual of Obstetrics. By A. F. A. King, M.D., Professor of Obstetrics and Diseases of Women and Children in the Medical Department of the Columbian University, Washington, D. C. pp. 325. Philadelphia: Henry C. Lea's Son & Co. 1882.

This manual will be found useful by the busy practitioner, for two reasons: 1st. The instructions and advice it contains are intelligibly given, and so arranged as to readily be found when wanted. 2d. The book is small and of a shape convenient to carry about. By its use the practitioner may often be enabled to relieve himself from very embarrassing situations. The book is well illustrated and contains a complete index

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

DIGITALIS AND ACONITE.

Modern science has unquestionably settled many formerly doubtful points, and while, perhaps, for many years to come, empirics will have to guide us to a great extent in therapeutics, physiological observations based upon experimental research will finally bring order out of chaos, and give us the why and the wherefore. This is nowhere more apparent than in the two great remedies by which we influence the action of the heart, digitalis and aconite. There are still many physicians who cannot see the great results gained by physiological experiments with drugs; let them compare a work on materia medica published twenty years ago with one of our time, and their eyes will be opened. What did we know formerly of digitalis and aconite? That they were remedies by which we might reduce the action of the heart and lessen the frequency of the pulse. But observations were published giving seemingly very antagonistic results. One report would show that aconite, instead of reducing the pulse really accelerated it, while a physician of equal repute would relate a case where this remedy undoubtedly diminished the number of beats. Similar contradictory observations were made of digitalis. Who threw light on the subject? Those patient investigators, who, with the aid of all modern means of research, carefully watch the action of drugs on lower animals and scrupulously note the effect on blood pressure, etc., guided us out of the labyrinth and gave us the definite indications for the use of these remedies.

And what is the result of their experiments? They have proven that digitalis is a tonic for the heart; that under its use the contractions of the organ become more powerful; that in consequence the frequent and weak pulse becomes slower and fuller, and that this remedy should, therefore, be employed, when the rapidity of the pulse is due to debility of the main organ of circulation and the blood pressure is diminished. They have further demonstrated, that the effect of aconite is exactly the opposite; that this remedy reduces the strength of the impulse; that in cases of overaction of the organ, of too powerful contractions of the same, it diminishes the frequency of the pulse and reduces the blood pressure. We can now see the reason why, in some cases of acute croupous pneumonia, digitalis is the safer remedy, and in others aconite or veratrum viride, the latter being very similar in its effect to aconite. If a strong and robust adult, with a vigorous heart, is affected with pneumonia, our aim, in the beginning, must be to reduce the strength of the heart, and of the blood pressure, not to increase it, and we administer aconite or veratrum viride with happy results. In such a case the remedies named will diminish the frequency of the pulse. But if an anæmic individual or an old person with a weak heart is suffering from pneumonia, and we should employ the same means, the heart would become weaker still, and the pulse at the wrist more rapid. Here digitalis will give tone and strength to the heart; under its influence the latter will contract with more vigor, and the pulse will be diminished in frequency.

It would lead us too far, were we to give every indication for the use of digitalis or aconite; but

this rule can always be followed with safety: Whenever we wish to reduce the arterial tension and the power of the heart, when we aim to weaken the latter, aconite is the remedy indicated; while to increase the strength of the organ and the activity of the circulation, to diminish the frequency and improve the tone of the pulse, we have to employ digitalis. Therefore, in organic diseases of the heart, aconite is beneficial in hypertrophy, and digitalis in dilatation.

SALICYLIC ACID.

While experience has proven that salicylic acid does not diminish the dangers of acute articular rheumatism—the percentage of heart complications, if we can rely upon statistics published, being rather higher since the use of this medicine than under the former alkaline treatment—the remedy is as near a specific in this disease as we will perhaps ever possess. But it should be given in large doses, and frequently enough. If correctly administered, it will invariably reduce the temperature, lessen the severity of the inflammation and swelling, palliate, not only the excruciating pain, but totally remove the latter in the majority of cases, and lastly, decidedly shorten the duration of the disease. Of this we have often, in private and hospital practice, the opportunity to convince ourselves. There are still many physicians who either have not as yet used this remedy at all, or did not succeed in gaining the results mentioned. Such physicians generally hesitate to push the treatment, because they are afraid, and dread the collapse about which so much has been written. But while the practitioner has frequently been cautioned not to push the remedy till the collapse takes place, and, to make matters worse, while it has been said that such accidents may happen suddenly, no sign has been given by which the less experienced physician might know when to stop. A long acquaintance with the drug has convinced us of the truth of the following assertions:—

(*a*) Salicylic acid or its combinations can be given to an adult suffering from acute articular rheumatism, in doses of twenty grains every two hours, without any danger, *as long as the pulse does not beat below* 84 *in a minute.* Whenever the pulse falls below 84, the dose has to be decreased to ten grains, or, still better, the frequency of the original dose is diminished, say every four hours or three times daily, instead of every two hours. Should the symptoms again become worse and the pulse increase in frequency, the physician can without any risk administer the drug the same way as at first, and continue it again, till either there is no more necessity for such large doses and their frequent repetition, or the pulse begins again to drop below 84; amelioration of the symptoms and decrease in the pulse rate going hand in hand.

(*b*) Instead of giving salicylic acid alone, the following combination acts better and—if the first rule be observed—is safe, even in cases of pre-existing organic heart lesions, and seems decidedly to lessen the danger of endo- and pericarditis arising as complications:—

℞. Acidi salicylici, ℥ ss
Liquor. ammoniæ acetatis, f℥ ij
Aquæ destillat., f℥ iij
Syrup. cortic. aurantii, f℥ j. M.
Sig.—A tablespoonful in water every two hours.

If this combination is prescribed, and the first rule followed, our readers will find that, in cases of acute articular rheumatism, the effect of salicylic acid mentioned above will invariably take place, but collapse never happen.

Notes and Comments.

Cesspools.

From the *Sanitarian* we take the following very pertinent remarks: Cesspools and privy vaults are the bane of the country; the perennial hot house of scarlet fever, measles, typhoid fever, diarrhœa and dysentery, and the exciting cause of many other diseases. But country house privies, odious as they are, are insignificant as compared with what Professor Frank H. Hamilton, in his paper before the New York Academy of Medicine, so significantly designates, "Dangers of Æstheticism," if applied to hidden city vaults, school house cesspools, æsthetic *new* villages, villas and fashionable country resorts "for health." For the old-fashioned country-house vault, light and air, aided by the sense of smell, do something toward lessening dangers. But the

æsthetic vaults and cesspools common to fashionable new villages, schools and summer resorts, are hidden away in dark corners, or excavated and carefully covered, even turfed over, lest the beauty of the lawn be marred. Carefully hidden, as the viper or the sneaking assassin, and supplied with all the conditions of potency—darkness, warmth, moisture and ferment—the conditions are complete for the development and self-multiplying of disease poisons, call them germs or what you may, to an illimitable extent. For the *old* country-house privy there may be some excuse for its construction, but in the light of present knowledge, those who tolerate them might learn wisdom from the cats; but no time should be lost on the obtuseness of those who will not learn.

All such sources of disease should be indicted and removed as common nuisances, and to build one be made a criminal offence.

Rupture of the Œsophagus.

At a recent meeting of the Royal Medical and Chirurgical Society (*British Medical Journal*), Mr. Stanley Boyd related a case in which the œsophagus had ruptured into the right pleura. The patient was an infant, aged four months, who had been exceedingly ill for some weeks before death, with erysipelas followed by peritonitis, which had followed an operation for strangulated undescended testicle. About two hours before death dyspnœa suddenly set in, and lasted for an hour. When the dyspnœa passed off the child was able to take food in small quantities, but while it prevailed it choked when given brandy and milk. At the autopsy, about one ounce of clear, deeply blood-stained fluid, free from lymph or any trace of milk, was found in the right pleura; both lungs were partially collapsed, the lower and middle lobes on right side were very red, and were studded with petechiæ; and at the root there was a considerable sub-pleural hemorrhage. The pleura was absent from the œsophagus over the whole of its right side, below the root of the lung, and its torn edge could be easily seen near the diaphragm. Pressure on the œsophagus caused a bubble of air to escape through a small opening in its wall; on the inner aspect of the gullet several small blood-clots were found near the hole referred to; this measured about two millimeters, and for a short distance above and below, the circular muscular fibres were exposed. Mr. Boyd considered that the clots in the gullet, the bloody fluid in the pleura, the marked redness, and numerous petechiæ on the surface of the lung, proved that the perforation took place during life, and that, possibly, it had been the cause of the dyspnœa which set in a few hours before death.

Arsenical Treatment of Chorea.

M. Siredey, we read in the *Revue de Thêrap. Méd. et Chirurg.*, has long had recourse to arsenic in the treatment of rheumatismal chorea, and has had good results from this medication. He uses the solution of Bondin:—

℞. Ac. arsenious, gr. xv
Aquæ destill., Oij. M.

This is allowed to boil for about a quarter of an hour, and is then ready for use. The extreme dilution of the solution is favorable for its use among children. For a child from six to ten years of age, about one drachm and a half may be given daily, in divided doses, in sweetened water. In this way the medicament is generally well tolerated.

Dr. Sottmann, of the Breslau *Clinic*, constantly prescribes the following solution in chorea:—

℞. Liquor Fowleré, ♏iv
Aquæ, ℥ij. M.

This quantity to be taken in divided doses daily. He generally obtains a complete cure in from 16 to 21 days.

In some cases he adds from 8 to 15 grains of chloral to the prescription. He has generally found that anæmic children, and those of hereditary nervous dispositions, bear this form of medication well.

The Chemical Cause of Life.

Up to within a very few years, physiology did not suspect that there was any chemical difference between dead and living protoplasm. Many still will say there is none. But recent researches, beginning by an article of Pflüger's in 1875, point strongly in an opposite direction. One of the ablest essays in the affirmative was written last year, by Dr. Oscar Loew (well known in scientific circles in this country) and Dr. Thomas Bokorny, and published at Munich, with the title *Die Chemische Ursache des Lebens theoretisch und Experimentell nachge, wiesen*, pp. 51. The result of their investigation goes to show that living protoplasm owes its property of *life* to the presence of aldehyde groups, which are characterized by intensely active atomic movement. When death takes place, it is coeval with and caused by a transformation of these aldehyde groups into amyd groups, with diminished molecular motion, thus leading to cessation of action.

The thoughtful reader will not fail to note the very great importance of this physiological theory,

and we can say that it is supported by a series of admirably careful experiments. We earnestly commend the pamphlet to American physicians. It is published by J. A. Finterslin, Munich, and can be obtained through any importer.

Laryngeal Anæsthesia.

has been [illegible]

Each new advance has contributed to the removal of disease, the diminution of human suffering, the prolongation of life, and the increase of the happiness of mankind; and we may reasonably hope, from the past history and present condition of medicine, for a like progress in the future. Our knowledge of disease and its removal has not yet reached perfection, and as long as this is not the case, there is ample room for continued investigation.

In harmony with this view, I have selected for the present occasion the subject of micro germs. It is true our knowledge of these germs is yet in its infancy, and we cannot accurately estimate their importance in producing disease. Yet the subject is one of such great extent, and seems to be so intimately connected with the manifesta- neck simultaneously. The application for two minutes sufficed to render the larynx insensible to the presence of a foreign body. The method is suggested as likely to be useful in reflex spasms originating in the interior of the larynx. It is possible, also, that the facts afford an explanation of the unquestionable utility of the application of ice to the exterior of the larynx in some cases of spasmodic croup.

Imperforate Hymen.

Dr. W. G. Moore says, in the St. Louis *Clinical Record*, that a young girl of seventeen called at his office with symptoms of a malarial attack, for which he gave her appropriate treatment. Three days later he was called to see her, and upon entering the room found her screaming with pain. The mother said that the fever had "settled in Lizzie's womb." Every few minutes she would have a very severe pain in every way simulating labor pains. On attempting to introduce the finger into the vagina, it was met by an elastic tumor as large as the vertex of the ordinary fœtal head, and having exactly the feel of the protruding membranes when about to rupture. Further inspection revealed an exceedingly thick and resisting imperforate hymen. This was punctured with a bistoury, when, by the aid of a grooved director, the incision was enlarged to the full size of the vagina. The after treatment consisted in rest in bed, and carbolized injections. The retained blood in this case was at least a quart.

A New Fungus.

The *Gazette Médicale* states that M. Pasteur has found an organism in the blue and green discolorations which are sometimes seen on old surgical bandages, which preserved through many cultivations the same characters and properties. It consists of colorless globular cells, from $\frac{1}{1000}$ to $\frac{5}{1000}$ of a millimeter in diameter, and has the power of secreting a pigment, which may easily be dissolved out by chloroform. The blue, or pyocyanine is reddened by acids, and restored by alkalies. Dissolved in a weak acidulated solution, neutralized by potash, and treated again with chloroform, pyocyanine yields a pure blue liquid, from which, after evaporation, it appears in the form of crystals, sometimes as prisms or matted needles, at others as rectangular plates. The watery solution of pure crystalline pyocyanine is neutral, and is unchanged by boiling.

Arsenical Poisoning from Sardines.

Dr. P. S. Jenkins, in the *Medical Herald*, reports the following: He was called to see two patients, whom he found vomiting and purging violently, with pain at the epigastrium, intense thirst, dryness of fauces, extremities cold, shivering, chilly, pulse scarcely perceptible and very rapid, respiration belabored, great agitation and restlessness, intellection good. Under the following treatment they both recovered: Milk and eggs to protect mucous membrane; hypodermic injections of sulph. morph. and atropia, quinine; carbonate of ammonia and whisky were given as cardiac stimulants, and dialysed iron as a physiological antidote. They had both eaten sardines and oysters. Upon examination, the sardines were found to contain a large quantity of arsenic.

Pet Animals as Carriers of Contagion.

The *Sanitary News*, calling attention to this danger, says: The contagious feature of some diseases has been disputed by the incredulous, because no channel of communication could be discovered between the first and subsequent cases. Dr. William Bunce, of Oberlin, Ohio, reports a case in which five children of a family of six were taken with diphtheritic sore throat, no source of contagion being discoverable about the premises. A cat in the barn was found to have the characteristic lesions of diphtheria, and inquiry elicited the fact that the cat had been

fondled by the children during its illness. A few months later this same observer lost a patient from diphtheria, who had a few days before charitably removed some obstruction from the throat of a pet cat, which, upon examination, was found to be diphtheritic false membrane. In these instances the cats were made the carriers of the contagion by contracting the disease, either from some preëxisting case among animals of their own kind, or among people who petted them, or it may be from some unsanitary surroundings.

A Rare Affection.

M. Niellé, naval surgeon and professor of colonial pathology at Brest, has observed a papular eruption on a cabin boy of fourteen years of age, which is peculiar in character, and cannot be mistaken for either scabies or eczema. It resembles an affection called crawcraw, which exists among the negroes of the New Guinea coast. Microscopical examination of the serosity of the papules brought to light the presence of nematoid worms, similar to filariæ, in different degrees of development, from the adult and sexual stage, down to the embryonic. In the embryonic stage they are found in the blood. This affection is not contagious. It is believed that the filaria enters the animal economy by means of the water imbibed. In the adult stage the worm is one-third of a millimèter long, and one-hundredth of a millimèter in diameter.

Paronychia Gangrænosa.

Mr. Croly presented two specimens of this disease to the Pathological Society of Dublin (*British Medical Journal*). Both patients were middle-aged ladies, and in both the seat of disease was the inguinal phalanx of the first finger of the right hand, which phalanx at last separated. One of the initial symptoms was severe pain, like the stinging of nettles, in the end of the finger; vesicles then formed, which passed into unhealthy bullæ.

Pericarditis in Uræmia.

M. Keraval, in a recent memoir, has made an interesting study of the variety of pericarditis sometimes observed in Bright's disease.

From his researches it seems to occur most frequently in interstitial nephritis, and is even then rather rare. It is always in the last period of the disease, generally after the development of uræmic symptoms, that it appears. It is constituted by a neo-membranous inflammation, terminating sometimes by adherence of the layers of the serous membrane. Generally there is no liquid effusion, or it is in very small quantity. As it is not accompanied by endocarditis, the pericarditis often passes unperceived unless the heart is examined, when the usual physical signs are found. It is generally of grave prognosis, as the patient soon succumbs to the uræmic symptoms.

M. Pasteur's Discoveries.

in the treatment of rheumatismal chorea, and has had good results from this medication. He uses the solution of Bondin:—

℞. Ac. arsenious, gr. xv
Aquæ destill., Oij. M.

This is allowed to boil for about a quarter of an hour, and is then ready for use. The extreme dilution of the solution is favorable for its use among children. For a child from six to ten years of age, about one drachm and a half may be given daily, in divided doses, in sweetened water. In this way the medicament is generally well tolerated.

Dr. Sottmann, of the Breslau *Clinic*, constantly prescribes the following solution in chorea:—

℞. Liquor Fowleré, ♏iv
Aquæ, ʒij. M.

This quantity to be taken in divided doses daily.

Sarcoma of Tonsil.

At a recent meeting of the Pathological Society, of London (*Medical Press and Circular*), Dr. Samuel West presented a specimen removed from a woman, aged seventy-four years, who had come under his care for "sore throat." The right tonsil was the seat of a large tumor; it was rapidly increasing in size, and displacing, but not invading, the tongue and adjacent structures. She died within five months of its commencement. The lymphatic glands of the neck were all much enlarged. A large secondary growth was found between the spine and the spleen, and smaller ones elsewhere. Microscopically, the tissue was found to be a small round-celled sarcoma.

Congenital Teeth.

Dr. F. B. Harrington reports the following case in the Boston *Medical and Surgical Journal*:—

Two small white spots were accidentally noticed on the lower jaw of a child, then twelve days old. The spots were supposed to be thrush. Four days later the mother complained that the child caused her great pain in the nipples while nursing. An examination of the mother's breasts did not show adequate cause. On looking into the child's mouth the two spots were found to be two sharp-edged incisor teeth. They were removed, and appeared to be the right central and right lateral lower incisor.

Special Reports.

NO. VI.—MICRO-GERMS.*

BY DR. W. F. MUHLENBERG,
Of Reading, Pa.

The science of medicine, like its sister sciences, has been eminently progressive in its character. Each new advance has contributed to the removal of disease, the diminution of human suffering, the prolongation of life, and the increase of the happiness of mankind; and we may reasonably hope, from the past history and present condition of medicine, for a like progress in the future. Our knowledge of disease and its removal has not yet reached perfection, and as long as this is not the case, there is ample room for continued investigation.

In harmony with this view, I have selected for the present occasion the subject of micro germs. It is true our knowledge of these germs is yet in its infancy, and we cannot accurately estimate their importance in producing disease. Yet the subject is one of such great extent, and seems to be so intimately connected with the manifestations of disease in the human system, that it has appeared to me advisable and useful to present some of the many interesting facts and observations with reference to these germs, and the proper methods to be pursued in propagating and preserving them. This seems to be the more necessary because the knowledge of them is not easy of access, often being of a fragmentary character, and scattered in many publications.

The only work, so far as my knowledge extends, to be found in this country, on the subject of "Bacteria" or germs, is a translation by Dr. Sternberg, U. S. A., of a French work on the subject. by Dr. Magnin, and to this we especially refer all those who are interested in the study of these germs in their botanical peculiarities.

Before proceeding with our subject, we may remark, that every physician of the present day ought to possess a microscope; for, by following the methods of examination heretofore proved to be scientifically accurate, or discovering new scientific processes of investigation, he may succeed in solving problems which hitherto have escaped solution, or find out new facts which may be of incalculable benefit to the human race. The researches of Pasteur, a single individual, it is said, have been of more service to France than the milliards paid to Germany. The possibility that some of our infectious diseases, by a process of vaccination, may be rendered harmless, is sufficient to attract workers in that direction; and though the results thus far may seem to be insignificant, they ought not to be discouraged by the sneers of others, but patiently continue their labors, with the hope of ultimately obtaining more accurate knowledge upon the subject.

The only direct test for germs is the peroxide of hydrogen, H_2O_2, but as it is split up into oxygen and water, by numerous metals, and also by the red-blood corpuscles, it is of an unreliable character. The products of the fermentation, degeneration, and putrefaction of germs, such as ammonia, sulphuretted hydrogen, leucin, tyrosin, indol, phenol, skatol, cresol and paracresol, phenylpropionic and phenylacetic acids, can be more readily detected. The pancreatic fermentation decomposes albumen into leucin, tyrosin, and similar bodies; but indol, skatol, phenol, and cresol, are ordinarily found in the large intestine. The coats of the large intestine seem to be endowed with a great capability of resistance to germs and their products; and while these bodies appear to be unable to enter the system through the lower bowel, the marks of their entrance, in the shape of ulcers and colonies, are always found in the small intestine, particularly in the neighborhood of the ileo-cæcal valve. Sulphuretted hydrogen, (1) always present in the large intestine, in larger or smaller quantities, has been proved to have passed through the coats of the small intestine, and to have been excreted through the kidneys; and this shows that products of decomposition can only enter the system through the upper portions of the bowel. The excretions of the intestinal canal of new-born infants do not contain the higher products of albuminous decomposition, as indol and skatol, and, as has been frequently proved, no germs. *

All these products (2) appear to be removed

* Read before the Pennsylvania State Medical Society at its annual meeting, at Titusville, May, 1882.

* The tests for leucin, $C_6H_{13}NO_2$, are as follows: If a fluid suspected of containing it is evaporated in a platinum dish, with a small quantity of nitric acid, there will be left a colorless, almost invisible residue, which, when heated with a little caustic soda, becomes yellow or brown, as the leucin happens to be pure or impure; and, on further concentration, changes to oily-like drops, which move freely around the dish without adhering (Scherer's test). When this substance is dissolved in a boiling solution of lead-acetate, on the addition of ammonia to the cooled solution there will be a separation of shining lamina, consisting of a mixture of leucin and plumbic oxide, from which the leucin can be subsequently sublimed, in wooly masses.

The tests for tyrosin, $C_9H_{11}NO_3$, are as follows: Add to the suspected fluid, diluted with some water, a solution of the acid nitrate of mercury; then boil for some time; if tyrosin is present, the solution, at first, will exhibit a beautiful rose-red color, and subsequently, a red-precipitate (Hoffman's test); or, pour a few drops of concentrated sulphuric acid on the fluid, heat it moderately, when it will dissolve with a faint red color. If water and barium carbonate be added until effervescence ceases, on evaporation and filtration, the addition of a few drops of a neutral solution of ferric chloride will give rise to a violet color (Peria's test).

as so-called ethylsulphuric acid. Phenol or carbolic acid, in addition to a number of intermediary products, seems to be derived from tyrosin, or, more probably, comes off as a paracresol.

Indol, $C_8H_7N_7$ melting at 52° C., and skatol, either C_9H_9N, or $C_{10}H_{11}N$, viewed as a methyl-indol and melting at 95° C., are two of the most important products of albuminous decomposition, as their presence almost invariably indicates germs.

The presence of skatol with indol changes somewhat the result of the ordinary test for indican in the urine (it is necessary to add to the urine an equal quantity of hydrochloric acid, and of a saturated solution of chloride of lime, or chlorinated soda), for, if indol alone is present, the fluid becomes green or blue, but if skatol is in excess, it becomes violet or red. Indol passes over into the urine as the indoxysulphate of potassium. There is a marked increase of indol in dyspepsia. gastro-duodenitis, chronic constipation, intussusception, diarrhœa, cholera and typhoid fever, while phenol is apparently increased in peritonitis and miliary tuberculosis. Jaffe found that the tying of the small intestine caused an increase of indican in the urine; and the same result was produced by a prolonged and exclusive meat diet. Skatol gives with dilute nitric acid a pale violet color, and with fuming nitric acid a red flocculent precipitate (Nencki's test). Skatol (3) besides, is less soluble in water, and is not discolored by the addition of chlorine water. Dr. Wernich (4) who has made a special study of these products of albuminous decompo sition, lays down two general principles: Firstly, "That the bacteria themselves prepare the conditions for their destruction;" and, secondly, "That very slight quantities of the poisons so generated protect against infection by new organisms of the same variety;" and he believes that these germs cease to increase, not on account of a deficiency of oxygen or nutriment (although many germs are anærobiotic), but because of the generation of some bodies of this kind which occasion antisepsis instead of putrefaction. The fact that the products of decomposition of the germs artificially cultivated do not smell of indol or skatol (so-called from the Greek word σκῶρ, gen. σκατός) proves almost conclusively our inability as yet to solve the life problems of these germs; nevertheless it does seem remarkable that a body like carbolic acid, one of our best antiseptics, should be a natural product of the decomposition of albuminous bodies in the intestines. Phenylacetic acid, C_6H_5COOH, C,H_2, or $C_8H_8O_2$, and phenylpropionic acid, $C_6H_5CH_2CH_2COOH$, or $C_9H_{10}O_2$, bodies analogous to benzoic acid, but as yet insufficiently known, and phenol and cresol, two bodies well known, make up the list of bodies resulting from the decomposition of germs.

In the microscopic examinations, the various appliances used should be in a state of absolute cleanliness, on account of germs in the various fluids used, and from the constant presence of spores in the air. Micrococci and bacteria (5) have been found even in a two per cent. solution of carbolic acid, as well as in distilled water and various hypodermic solutions, but cannot be found in perfectly fresh solutions of carbolic acid, which seems to lose its efficacy as an antiseptic after exposure to the air. From experiment at Montsouris, in France, it was shown that during the warm months there was an average of 28 spores in each litre of air, while during the winter months very few could be found. On the contrary, after a long continued rainfall, nearly 100 spores were found in each litre, and the air of rooms was always more deficient in them than that outside. Distilled water, which has been thoroughly boiled, should be used in all the investigations. All the glass ware should first be cleansed with some strong mineral acid (sulphuric acid and a solution of bichromate of potash answering very well), then well washed with distilled water, and subsequently purified with absolute alcohol, the remains of which should be burned out, or the glass passed through the flame of a Bunsen burner. Any metallic instruments, used for applying a deposit on a slide, or for other purposes, should be passed through a flame, and, where possible, used in a heated condition. Keeping the various instruments for some time in a hot air bath, or an incubator, at a temperature of 100°–120° C., will be found almost necessary. After the culture fluids have been prepared and sterilized, a compact wad of cotton, which has been heated to 135° or 140° C. will serve to cover the test tubes and prevent the access of spores. It is not necessary, and, in fact, it is disadvantageous, to carbolize such wads, as the presence of carbolic acid may keep the germs from growing.

Germs may be confounded with blood corpuscles, fat globules. epithelial cells and their nuclei, leucocytes, mycelial threads, vibrios, coagulated fibrin, granular crystalline deposits, granules of casein, particles of fibres, wood, feathers, etc., and air globules. and possibly, the small granules spoken of by Howlett (6) which, 2.5 to 4 m. long, arrange themselves in racemes and can be stained with methyl-violet.

Forms (7) whose thickness does not exceed 1 m. cannot, in general, be distinguished from inorganic bodies of like size and form. Crystalline bodies, which have double refraction, may be recognized by the polariscope, as germs have only single refraction. If granules possess continuous motion, particularly in a straight or curved line, they are certainly schizomycetes or monads, while molecular motion gives no positive decision. If the granules arrange themselves in pairs or triplets, and, particularly, if they show a true spherical or oval form, they are organized. If bacilli seem to be present, and if they present a knee-shaped curvature, they are also organized. "In zoogloea forms (8) the micrococci of an individual zoogloea mass are always uniformly of one size, and are always at the same distance from one another, in contradistinction to albuminous and fat molecules." Fat and most other molecules are soluble in alcohol, liquor potassæ, ether, strong acids and alkalies. Pus and epithelium are dissolved by caustic potash, while inorganic and many organic bodies are destroyed by the strong acids. The granular mass (9) is insoluble in acetic and hydrochloric acids, caustic potash, glycerine, chloroform, and oil of cloves; ammonia makes germs more colorless, but dissolves pus, while liquor potassæ, with a subsequent addition of iodine, colors the germs brown. Cultivation is the best mode of purifying and distinguishing the germs.

The germs are best examined by the dry method (10) which consists in allowing a thin layer of the fluid containing them to dry on a slide, under a cover glass, and subsequently softening and staining it for examination. The substance should be spread in a thin layer, so that greater or less interspaces lie between the objects, and then allowed to dry under cover, so as to prevent the admixture of other spores. Such dried slides can be preserved, even for months, under a bell-glass, and then softened. Water and glycerine loosen the germs from the glass, but absolute alcohol, and a half per cent. solution of chromic acid renders them insoluble, but hardens them so much that they often lose their natural form. Acetate of potash (aqua 2 pts., acet. of pot. 1 pt.) causes them to swell up, without separating them from the glass, and although it makes them paler, does not change them. In some cases, it is better to take the fluid for examination from the top of a culture tube, in others, from the bottom, where are usually found the permanent spores. In the examination of fresh bodies or liquids, like urine, it is recommended to add carbolic acid or thymol to the fluid, to collect the sediment, and after the addition of a few drops of a half per cent. solution of caustic potash, to stain. A solution of osmic acid (1 : 100) serves to harden the mass of filmy bacteria found on the surface of a liquid, and surrounded by a zoogloea mass.

A strong solution of iodine (2–5 per cent.) stains them a yellowish brown; united with sulphuric acid it gives some of them a blue color. All the different aniline dyes, eosin, fuchsin, saffron, Bismarck brown, methyl-green, blue, and violet, are all well suited for staining. Methyl-blue and violet, whether used in strong or weak solutions, seem to have the strongest affinity for germs. Aniline brown is best for photography, but as it is rendered colorless by acetate of potash, the germs must be preserved in glycerine and water. While tube-casts and the granular membrane in urine are also stained blue by methyl-blue, the staining is not so deep as with the germs. Hæmatoxylin preparations, after thorough washing, can be mounted in glycerine, or a solution of chloride of calcium. Glycerine and acetic acid stains them a yellow brown. They are stained red by carmine, hydrochloric acid and glycerine, and brown by carmine, if, subsequently, they are treated with the tincture of the chloride of iron. The acid preparations of the anilines, where the coloring principle seems to lie in the acid, like the picrates, do not stain them. The anilines have the further advantage that they soften the germs without loosening them from the glass, unless too weak a solution is used. A concentrated solution of sulphate or acetate of calcium (1 : 2) can also be used to preserve them, after they have been stained by methyl-violet. In examining animal tissues it is proper to harden them in alcohol, make the sections, and stain in the usual manner. After the tissues have been stained, a weak solution of carbonate of potash will decolorize all the animal tissue, without affecting the germs.

There are four fundamental forms: * spheroid or spherobacteria, rod-shaped or microbacteria, thread-like or desmobacteria, and spiræ or spirobacteria †. The reaction with iodine and sul-

* Klebs (*l.c.*) divides the pathogenic germs into two classes: The monadina, and the microsporina. The granules of the monadina are larger, and lie imbedded in a sort of jelly, which forms a clear zone around every granule. The granules themselves are arranged in parallel rows, and the brown color of septic micrococci is lacking. They are less stained by the anilines. Septic processes, like diphtheria, are produced by the microsporina. The monadina bring on inflammatory processes, attended with the formation of connective tissue, such as the acute exanthemata, and rheumatic, nephritic, hepatic, and cardiac inflammations.

† The coccobacteria (11) are micrococci, which are capable of transforming themselves into short rods, and form groups united by zoogloea. While, by prolonga-

phuric acid, proving the presence of cellulose, shows them to be of vegetable origin, often microscopically undistinguishable. They can be differentiated best by their mode of growth on solid substances.

As germane with the scope of the address, we present a short description of the more important supposed pathogenic germs.

The bacilli malariæ (12) "are small rods, 5–10 m. long, which, during their evolution, become converted into tortuous filaments, which divide into joints by the formation of clear spaces in the protoplasm, or, by means of separating membranes. The filaments produce spores on the surfaces exposed to the air, and spores are developed in the interior. The spores are situated in the centre, or toward the extremities of the joints, but may be found in both places at the same time." For their growth they require oxygen, a temperature of 20° C., moderate but steady humidity, and the direct action of the sun. In the body they are only found in the cold stage of the fever (by aspiration of the spleen).*

The bacillus anthracis is found in translucent filaments, more or less segmented. At the end of forty-eight hours, in culture fluids, it shows germs distributed in series along the filaments. There is a connection of gelatinous matter, which is absorbed, and eventually the germ drops off, being reduced to so called germ-dust, which can be cultivated after lying dormant for years. The bacilli (13) of putrescent blood are rounded at the ends, while the bacilli anthracis are perfectly square at the same place.

The micrococcus diphtheriæ is a minute spheroid, found particularly in the mucous and submucous vessels and the lymph channels. It is (14) 1–1½ m. long and 3 m. broad in the deeper portions, and 4 m. long and 1.1 m. broad in the superficial areas. They are generally associated in pairs, more rarely in chains, but frequently in colonies, in which the gelatinous mass can be cleared up by acetic acid. Their products seem to be fatal to themselves, as in cases of convalescent diphtheria very few can be found, but in their place, bacilli, leptothrix and the bacteria of putrefaction. The presence of rod-bacteria in diphtheritic membrane (8) is proof that it has commenced to putrefy.†

The bacillus typhi, 80 m. long and 5 m. broad, found mainly in the lymphatic organs of the abdomen (intestinal mucous membrane, intestinal glands, spleen), is more slender than the ordinary bacteria of putrefaction (16), has permanent spores (17), and takes staining less distinctly.* It is not found in the intestine, where there is even a tuberculous ulceration.†

The spirochæte Obermeieri is a non-extensible flexible filament, found in the blood of relapsing-fever patients only during the pyrexia, but is never found in the urine. On the contrary, the urine is full of micrococci during the remission. It can live (20) 14 days at 22° C., 15 hours at 38° C., and only 4 hours at 40° C.

If an albuminous or saccharine fluid is exposed to a high temperature, and the entrance of spores carefully excluded, it will remain perfectly unchanged, but if we add to it some putrefying substance, or some of the bacilli anthracis, we will find a decomposition apparently identical in both cases, except as regards the microscopic examination, and the result of the decomposition, for, in the former case the smell of putrefaction will manifest itself, while in the other only ammonia will be noticed. The innocent micrococcus (21) ordinarily found in the mouth has been transformed by cultivation into a variety of microgerm which speedily kills the animal inoculated (by septicæmia).

The ordinary hay-bacillus, (22) by cultivation in egg-albumen, and then in blood serum, has been transformed into the bacillus anthracis, but this has been strenuously denied (Koch *l. c.*), and, even if it were the case, it must be proved that the same transformation can take place in the body. Air and moisture seem better for cultivation, and an incubator, or moist hot air bath, is almost a necessity. After tubes have been sterilized, it is well to stand some aside for control-experiments, so as to be thoroughly convinced that whatever was added brought on opacity and decomposition of the culture fluid. Mechanical disturbances (23) and electricity apparently in-

tion of the cocci, rods are formed, which break up into chains by segmentation.

* In the examination for this germ, the air, taken directly over the surface of the ground, was drawn through an aeroscope of peculiar construction which allowed the deposition of all filaments and spores on a glass plate covered with gelatine and glycerine.

† It consists (15) of long, jointed, mycelial rods, and spores of two kinds; the one, oval or round, giving rise, by a gradual process of elongation, to the mycelium; the other, rectangular, and showing, after a time, minute, brilliant specks in their interior, about the size of an ordinary micrococcus.

* Wernich (*l. c.*) denies *in toto* these specific criteria of the bacilli typhi, and believes that the ordinary bacteria of the intestinal canal, by a process of ascent into the small intestines, find circumstances more suited to their propagation, and then produce typhoid fever.

† There is no doubt (18) that the bacilli typhi are present in every typhous plague of the intestines, as long as there is a process of development of the disease. They appear to reach the height of their development in fourteen days, and then undergo retrograde metamorphosis, after necrosis and ulceration or degeneration of the cells has taken place.

terfere with the growth of germs in culture tubes. The microbe of chicken cholera (24) reaching only slight development in sterilized urine, and destroyed in yeast solution, is cultivated most successfully in chicken broth, at a temperature of 25°–35° C.; and can be attenuated by allowing an interval to elapse between successive cultivations, and by cultivating at a temperature of 40°–45° C. The (25) micrococci of wounds do not produce putrefaction in culture fluid, and develop best when removed from the air. The micrococci of diphtheria, which multiply best at 40° C., and are arrested in their movements by a temperature of 70° C., do not need a large supply of oxygen, and are generally found at the bottom of a culture tube, while the bacilli are at the top. The animal organism (14) appears to be the best culture medium. The bacterium (26) killed by heating for several hours to 50° C., slowly increases even at 5° or 6° C., but, like the micrococcus prodigiosus, (27) (in quality of a blood-red color) develops best at 30°–35° C.

Blood serum is not a good medium for cultivating the bacillus septicæmiæ, which will not grow in the mucus of a healthy urethra, (Lister *l. c.*) but develops best in a hay-infusion, while the bacillus anthracis will not grow in a hay-infusion, but developes best in blood or aqueous humor. In all experiments, it is advisable to use the second or third cultivation, to prevent the admixture of other spores, and to develop the germs in the most favorable way. As nearly all bacteria contain sulphur, some little can be used in the culture fluid.

Sterilized bouillon, chicken or meat extract, ascitic fluid* aqueous humor, egg-albumen, blood serum, and hay-infusion are some of the substances used for culture fluid.

Among the artificial fluids are:—

PASTEUR'S.

	Gm.
Distilled water,	100
Sugar,	10
Tartrate of ammonia,	1
Ashes of 1 gm. of yeast,	075

(Bucholtz replaces the yeast by ½ gm. of phosphate of potash.)

COHN'S

	Gm.
Phosphate of potash,	1
Sulphate of magnesia,	1
Tribasic phosphate of lime,	01
Tartrate of ammonia,	2

Water, enough to make cc. 20.

* (Although the ascitic fluid, from a case of two years' standing, proved to be antiseptic, from the phenol and indol it contained. Salkouski *l. c.*)

KNOP'S.

	Gm.
Phosphate of potash,	1
Sulphate of magnesia,	1
Nitrate or chloride of lime,	2

Water, cc. 20.

Gelatine (28) added to culture fluids, in a proportion of 3–4 per cent., furnishes a good substance for solid cultivation, although potatoes, first boiled and then sliced, are the best medium for the dry cultivation, which appears to be the best mode of discriminating them with the naked eye. The only way of sterilizing fluids is by heat, and for this purpose, dry is better than moist heat. A temperature of 70° C. is generally sufficient to kill all bacteria, but it requires a prolonged exposure at 120° C., or even higher, to kill the spores. Very low temperatures, even as low as 40° C. (Irisch *l. c.*), fail to kill the spores.*

* Passing (29) the motes, seen in the air, through marble moistened with potash, and glass wet with sulphuric acid, and through a variety of ethers and alcohols, did not sterilize, though they were destroyed by their transmission through a flame.

(*To be continued*).

Correspondence.

Morphia Poisoning.

Ed. Med. and Surg. Reporter:—

I was called and arrived at 12.05 A.M. of 10th March, 1882, and found well developed woman, aged 22, lying on back in bed, mouth open, jaw pendulous, tongue dry, eyelids closed, pupils contracted, skin normal, respirations 5 per minute, pulse regular for 4 or 5 beats, and then fluttering and not easily counted. Was informed by her mother that she had taken "morphine" in a freak, to offset a joking statement of her husband, that he was going to come home drunk that evening; that she had taken it on an empty stomach, about 7 P.M., and had laughed over it. They supposed she had not taken enough to injure her; after a stage of excitement she had gone to bed and fallen asleep, about 11 P.M., and in half an hour had awaked her husband, who was asleep by her side, by urinating upon him, which caused him to investigate her condition. She was menstruating at the time; was said to be unused to effects of morphia. I have since had good evidence that she took six grains of sulph. morphia.

Treatment.—A large and very efficient mustard poultice was applied over stomach and allowed to vesicate, and warm irons so closely applied to feet as to unintentionally burn both severely. At 1.05 A.M., ⅓ gr. sulph. atropia was injected in arm; pulse 26 to ¼ minute. At 1.25 A.M. injected 30 minims sulph. ether; at 1.40 A.M. injected 30 minims spts. ammon. aromat. in abdominal wall; pulse weak, eyes slowly dilating and responding to light; respirations 8 per minute, in following manner: 4 resp. in first ¼ minute, and 4 in remaining ¾ minute, irregularly distributed and then no effort to respire for from 1½

to 1⅔ minutes. At 2 A.M. rather better pulse and respiration. At 2.15 A.M. respiration 7 per minute, divided as before in same manner. At 2.30 A.M. had 14 respirations in 3 minutes. At 3 A.M. pupils dilated; general condition seemed worse. At 3.10 A.M. resorted to artificial respiration. At 3.25 A.M. first used battery, according to rules, to induce respiration. At 3.45 A.M. respiration 10 per minute, which in 2 minutes increased to 14 per minute; general condition improved. At 4.15 A.M. forced a cupful of strong black coffee down throat, and she progressed toward recovery. The injections of ether and arom. spt. ammonia were repeated 5 or 6 times at irregular intervals. She says the first sensation she was conscious of during effort to resuscitate was the pain in feet, caused by hot irons, and I believe the burns on bottoms of both feet a powerful factor in arousing her. The treatment was directed to meet the indications, as they appeared, and each seemed to fit and fill a place that without would have left a fatal void. The case seemed a hopeless one, from amount taken on empty stomach, the time that had intervened, and the character of the respirations. C. POLLOCK, M.D.

Muncie, Ind., April 17th, 1882.

NEWS AND MISCELLANY.

The Advancement of Scientific Medicine by Research.

At the first meeting of the executive committee of the new association, the treasurer, Dr. Wilks, announced subscriptions amounting to over £1000. Sub-committees were appointed to report—1, on the present hindrances to research, due to the working of the Vivisection Act; 2, to report on the best ways in which exact researches in medical science can be encouraged; 3, to prepare a list of papers to be reprinted and circulated for the use of the profession, and through their means for the public; 4, to arrange for asking the help of those interested in the objects of the association as corresponding members in the principal towns of the kingdom.

Sanitation Justified.

The *British Medical Journal* says: "A noteworthy instance of the effect of improved sanitation upon the rate of mortality at Carlisle is mentioned by Dr. Elliot, in his last report on the health of that town. In 1841, the census gave the population as 23,959, and during the seven years (1842-1848) the average yearly mortality was 728; whereas in 1881, thirty years later, the mortality was only 717 among an increased population of 35,866.

Fame.

There lately went the rounds of the medical press an item from a South American medical journal, to the effect that the autopsy on the late President Garfield was made by *Dr. Longbranch*. Now comes something almost as bad from London. The *Medical Press and Circular*, of April 5th, 1882, says "Our American exchanges announce the decease of a prominent and well-known representative of American Surgery, Dr. Joseph Pancoast, Professor of Anatomy in the *University of Pennsylvania* from 1841–1874." Verily fame goes but a short way. Our trans-Atlantic brethren had some idea that Professor Pancoast was a great man, but the idea must have been a very vague one.

Items.

—Herr Krupp, the famous Prussian cannon maker, who employs many thousands of men, has compelled them all to be vaccinated. He provides the virus free of charge, and the penalty for refusal is immediate dismissal.

—The Senate of the University of Sydney have initiated a medical school in connection with that institution. They propose to confer three degrees—Bachelor of Medicine, Master in Surgery, and Doctor of Medicine.

Errata.—In second formula on p. 571, for ol. myrrhæ read *ol. morrhuæ;* in fourth formula, for syr. amyg. amar., read *syr. aurant. cort. rub.*

QUERIES AND REPLIES.

Drugs.—1st. Yes, if he wishes to do so, though it is not generally considered the proper thing 2d. Yes. 3d. Yes.

T. C. W. asks our subscribers to furnish their experience with chrysophanic acid in skin diseases; what strength they have used, etc.

T. C., Pa., would like to know the name for twin cows as known in the market, especially in England.

T. & B., N. Y.—You will find formula for Infusion of Golden Seal in this journal, May 6th, 1882.

MARRIAGES.

DANA—FARLEE.—On Thursday, April 27th, at the residence of the bride's parents, No. 50 West 46th st., New York, by the Rev. James H. Hoadley, Dr. Charles L. Dana, of New York, and Lilian G., daughter of George W. Farlee.

DAVIS—LEIGH.—On Thursday, April 20th, at St. John's Church, Bridgeport, Conn., by the Rev. E. W. Maxey, D.D., John Edward Lounsbery Davis, M.D., of Nyack, N. Y., and Mary Sophie, daughter of Wm. Leigh, Esq., of Bridgeport, Conn.

GARNER—APPLEBY.—In Spotswood, New Jersey, April 27th, 1882, by Rev. Chas. M. Parkman, Henry B. Garner, M.D., and Miss Amanda V. Appleby, both of Spotswood.

HALL—PEOPLES.—On Thursday, April 27th, at the residence of the bride's father, by Rev. L. Marks, D.D., assisted by Rev. Henry Rumer, H. B. Hall, M.D., of Riverton, N. J., and Reba, daughter of Mr. John Peoples, of Wilmington, Delaware.

HARRISON—NICOLL.—On May 6th, at the residence of the bride's parents, by the Rev. F. C. Putnam, Dr. S. D. Harrison, of Jersey City, and Agnes C., daughter of Dr. John Nicoll, of New Haven, Conn.

DEATHS.

DE YOUNG.—Dr Horace De Young, a prominent physician of Mauch Chunk, died suddenly, May 10th of epilepsy.

PAINE.—In London, England, May 1st, Dr. Horatio Paine, in the 40th year of his age.

SEARY.—On the 8th of May, Charles W. Seary, M.D., in the thirty-ninth year of his age.

WOOD.—In New York, on Thursday, May 4, 1882, of pneumonia, Dr. James R. Wood.

YOUNG.—May 3d, John Henry Weir Young, M.D. in the 23d year of his age.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1319.] PHILADELPHIA, JUNE 10, 1882. [Vol. XLVI.—No. 23.

Original Department.

Communications.

ATROPIA—SOME POINTS IN ITS PHYSIOLOGY AND THERAPEUTICS.

BY T. CURTIS SMITH, M.D.,
Of Aurora, Ind.

Like the plant from which it is derived and of which it is the active principle, atropia is anodyne, antispasmodic, diuretic, antisudorific, and also a powerful cardiac and respiratory stimulant. A remedy having such a wide range of action must become valuable in its therapeutic applications. It must also, of necessity, have a wide range of physiological effects on the human system. The gross effects are noted, as fullness of the brain with blood, fullness of the peripheral surface everywhere, greater activity of the general circulation and especially that of the capillary circulation of the skin; there is mental hebetude, mydriasis, dryness of and a feeling of constriction about the fauces. When the dose is very large it produces some pain in the head, vertigo, dimness of vision from the admission of too much light through the dilated pupil, flushed face turgidity of scalp and head, difficult deglutition, wakefulness, dryness of skin, with a scarlatinal rash, increased urinary secretion; there may be also considerable delirium, and finally, convulsions and unconsciousness. The pulse becomes very rapid and forcible until the vital powers are overcome, when it grows gradually weaker. The respiration is also much increased in frequency. In many cases there is increased peristaltic action, with griping. The mucous surfaces are everywhere dry. In females poisonous doses are apt to produce a catamenial flow, more or less free.

From these gross effects of atropia we propose to turn to view some of its influences over secretion, the circulation and respiration, and through these look a little to its therapeutic applications.

This agent produces its effects either through stimulating the sympathetic system of nerves or by more or less complete paralysis of the organic system of nerves. In the matter of the secretion of saliva. Nothing is better known, perhaps, than the fact that atropia checks its flow; stops it entirely in full doses. How does it do this? By producing paralysis of the chorda tympani nerve, which belongs to the organic system, and which regulates the secretion of the submaxillary gland. It is, in some sense, a compound nerve, having two sets of fibres, one of which acts upon the gland cells, causing them to secrete saliva. The other set of fibres induces dilatation of the arteries of the gland, and thus supplies blood more abundantly, from which saliva may be drawn by the cells. The failure of this secretion under the power of atropia is not due to the vaso-inhibitory fibres of the nerve. It is due solely to paralysis of the secretory fibres. This was shown to be so by Heidenheim, who found that when the chorda tympani was irritated after the use of atropia no saliva is secreted by the submaxillary gland, but its vessels become dilated as usual. This experiment showed clearly the existence of two sets of nerve fibres in the chorda tympani nerve; one set controlling the blood supply, the other, cell action. It was found also that irritation of the sympathetic caused a return of the secretion after the use of atropia. The

termination of the sympathetic filaments "must therefore have a different relation to the secreting cells from those of the chorda tympani." It is through its influence over these nerves that the secretion of saliva is controlled by atropia. The increased flow of urine under the use of atropia is largely due to increased blood pressure on the glomeruli of the kidneys, but partly owing to an increased flow of blood through the organs. It will be noted further on that the action of the heart is accelerated and its force of contraction increased. This would naturally increase the quantity of blood driven through any of the internal organs in a given time, and therefore, among others, increase that to the kidneys. This would give opportunity for the glomeruli to extract an increased quantity of urine from the increased flow of blood through them. But no doubt no inconsiderable difference in the quantity of urine discharged under the use of atropia is due to the diminished power of perspiration. The complemental play of discharges between the skin and urinary organs is well known to all physiologists. The increased diuresis under atropia, then, may be accounted for (*a*) by increased blood pressure, (*b*) by increased flow of blood through the kidneys, and (*c*) by the diminished perspiration.

Here we see the influence of atropia over the organic and inorganic systems of nerves as plainly as in that over the salivary secretion. We sometimes meet with cases of impending death from uræmic poisoning, where the blood-pressure is very low, the heart action feeble, and capillary circulation sluggish. In such cases a full dose of atropia hypodermically is worthy of a trial, for effects on the kidneys, provided there is not a weak heart that forbids it, because of the increased strain it would bring upon its walls. Atropia has a most marked influence over the circulation of the blood. This influence is exerted by the power this agent exerts over the nerve centres primarily, and through them, over the heart and vessels. The manifestations of the effects of atropia over the capillaries through the vaso-motor system of nerves is apparent to every one who has ever taken or administered full doses of it, in health or disease.

Its influence over cardiac movements is effected through the pneumogastric as its inhibitor, on the one hand, and the accelloratores, on the other. The balance of power between these nerves in their influence over cardiac action, in good health, is equal. The pneumogastric arises close behind the olivary bodies in the medulla, and, after its exit from the skull, descends the neck to the inhibitory ganglia of the heart. It is the nerve that inhibits the heart's action, slows or checks its movements. Physiologists have clearly demonstrated this fact by experimentation. They have uniformly observed that irritation of the pneumogastric at its centres, in its course, or in its final peripheral terminations, produces a diminished number of cardiac contractions. We sometimes meet with cases where persons have been greatly shocked by a light blow on the stomach, or over the solar plexus. Sometimes the pulse is rendered very slow by such blow, or it may be stopped altogether, death resulting instantly. The reason is apparent. The impression is carried up to the nerve centre of the pneumogastric in the medulla, via the sensory nerves and spinal cord. The nerve centre in the medulla transmits a strong impression along the nerve, or the nerve is strongly stimulated. It, therefore, acts with more than its normal power. Being an inhibitory of the heart, this stimulus, therefore, causes it to more or less suddenly slow or entirely check the heart's action.

Blows and injuries to the abdomen are not alone in their reflex influence over the pneumogastrics. Any injury anywhere produces, through reflex action, a similar but not so powerful an effect. Hence it is that sharp stings or severe pain influence cardiac action. And we find the contractions increased in number and force, or slowed, according to the impression conveyed through the reflex sensations carried to the cardiac nerves.

It is well known that if the pneumogastric nerve is divided in the neck, the heart runs rapidly; and that if the divided nerve be irritated, the action of the heart is slowed very much. This shows that the power to inhibit cardiac action is seated in the medulla, and that the vagi are the nerves through which that power is transmitted to that organ to regulate its action. One of the functions of this great nerve, then, is to slow the heart, keep it in bounds as to its rapidity of action. It is, in some measure, to the heart like the governor to the steam engine. Any remedy, therefore, that stimulates, or gives increased tone to it, will slow the action of the heart. Among these agents we have, foremost of all, digitalis, which gives strength to the heart, while veratria, muscarin, etc., may slow the heart without giving increased strength; in fact, may weaken its power of contraction.

But we have also nerves that increase the rapidity of the heart's action, and stand opposed to the sway of the pneumogastric—the accelloratores. These also arise in the medulla, and

passing down the spinal cord with the vertebral artery, emerging "through the last cervical and first thoracic ganglion, and passing to the heart, probably end in the excito-motory ganglia. Some accelerator fibres sometimes pass through the cervical sympathetic of the heart. They are the antagonizing nerves of the vagi, but unlike the vagi, are not constantly in action." (Arch. Dixon, Henderson, Ky.)

The cardiac function of the vagi is to regulate or slow the heart, while the accelerators increase its rapidity of motion. Over these nerves atropia exerts a marked influence. Perhaps it were better to say this agent exerts marked power over that portion of brain and spinal cord that give origin to these nerves, and those sympathetic ganglia that have in some measure control over the heart, and also control over the contractility of the blood vessels, great and small, especially the latter.

It has been clearly set forth and demonstrated that the nerves controlling the calibre of the vessels are compound in their character. These are the vaso-dilators and the vaso-constrictors. These are made to act under stimulus, so as to either dilate or constrict the vessels, especially the capillaries, according to the character of stimulus applied, and the manner of its use. It it now well known that we have many remedies that produce these effects. For instance, ergot effects contraction of the capillaries. Its therapeutic uses are thus often plainly indicated. Others produce dilatation and are used accordingly. Few remedies exert more power over the vaso-motor system of nerves than does atropia. This effect renders its therapeutic uses of very great importance. Hence, the need of their study and comprehension for daily use. We know of no clearer setting forth of the course and functions of these nerves than that given by the writer above named. (*Indiana Medical Reporter*, January, 1880.) "The vaso constrictor and vaso-dilator nerves emerge from the spinal cord through the spinal nerves; the constrictors being limited to the vaso-motor centre in the brain. This centre, according to Ludwig, is situated between the calamus scriptorius and the corpora quadrigemina, and from it fibres arise and pass down the spinal cord, emerging as follows: For the head, instead of passing directly, they go through the cervical sympathetic to the blood vessels of the ear, face and pia mater; for the upper extremities, through the sympathetic and brachial plexus; for the lower extremities, through the lowest spinal nerves and sacral plexus, and in the trunks of the anterior roots of the lowest lumbar and sacral nerves to the sympathetic, and thence to the lower extremities; for the cavities of the nose and mouth, through the trigeminus; for the abdominal contents, through the splanchnics, which are the most important of the vaso-motor nerves." It will be seen that every part of the system is connected with both the organic and inorganic systems of nerves. The constrictor ganglia that hold the calibre of the capillaries under control are everywhere present and ready to exert their power. Indeed, the exertion of this power is constant, and any failure of it permits dilatation of the capillaries and lowered blood pressure.

There is one other nerve to which we wish especially to refer at this time, the "depressor" nerve of Cyon and Ludwig, named for its discoverers. Its power is far reaching. It has influence over the whole vaso-motor system. It arises from the pneumogastric by one root, and from the superior laryngeal by the other root, and sends its fibres largely or altogether to the heart, in which they terminate, but the manner of their minute distribution is not yet fully known. When irritated it "inhibits the vaso-motor mechanism supplied by it," (*loc. cit.*), and "paralyzes the main vaso-motor centre in the brain, and thus causes the whole capillary system to dilate" (*loc. cit.*). When it is divided and then irritated the capillaries everywhere dilate, especially those of the abdominal organs. Of course blood pressure is at once reduced by diminished resistance to its passage through the capillaries. It will be seen that the superior laryngeal nerve is a branch of the pneumogastric, the first one given off in the neck. It "is the nerve of sensation to the larynx" (Gray), and arises from the middle of the inferior ganglion of the pneumogastric. This "depressor" nerve of Cyon and Ludwig is, then, essentially derived from the pneumogastric. Its great power over the vaso-motor system of nerves must be referred back to the seat of the origin of these special fibres in the brain, the nerve itself being only the medium through which such power is transmitted to the parts and nerve centres influenced by it. Any agent that would stimulate this nerve, or the seat of its origin, would inhibit the vaso-motor tract, over which it exerts a powerful influence. From what has been before stated of the power of this nerve, the agent would also paralyze the whole vaso-motor centre in the brain, and thereby permit or produce dilatation of the capillaries in general. Does atropia have any special power over this nerve? If atropia should paralyze this nerve, there would be general dilatation of the

capillaries. It seems to me that atropia does not exert such action, for it stimulates in a marked degree the vaso-motor centres of the brain, and produces contraction of the capillary system of vessels.

The action of this nerve, however, over the circulation of the blood may, at times, of necessity, be exceedingly salutary. We have said that the pneumogastrics may be looked upon as the governors of the heart's action, in some measure like that of the governor of a steam engine. On the other hand, the "depressor" nerve of Cyon and Ludwig may be looked upon, as Foster has said, in the light of the safety-valve" of the engine. "When the heart is surcharged with blood, the impression is carried by the depressor nerve to the vaso-motor centre" (*loc. cit.*). This it paralyzes, and allows the capillaries to dilate and receive the excess of blood. In this way the overstrained heart is relieved of its surplus of blood, cardiac dilatation or rupture is prevented, and when the cause of the disturbance is removed, the balance of power is restored and the circulation runs normally and smoothly again. Indirectly, then, this nerve has much to do with the influence exerted by atropia and other vaso-motor stimulants.

Atropia is a powerful cardiac and respiratory stimulant. It stimulates the accelerators, the function of which is to increase the action of the heart. But it also paralyzes the vagi, and thus the cardiac contractions are rapidly increased. The blood pressure is at the same time raised, because atropia stimulates the vaso motor centre in the brain, which the nerve transmits to the peripheral ganglia, thus securing contraction of the capillaries through their constrictor fibres. When there is thus a general contraction of the capillaries with increased cardiac action, the rise in the blood pressure necessarily results. This agent also paralyzes the splanchnic nerves. This would permit dilatation of the capillaries it supplies, but for the fact that the constrictor fibres are supplied with stimulus or are stimulated to action by the vaso-motor centre of the brain, and thus the blood pressure is kept up.

It will be seen that large doses of atropia would be liable, through the mode of action above pointed out, to throw an overplus of blood upon the already stimulated and rapidly contracting heart. If this overplus be permitted to continue its accumulation in quantity and pressure of blood on the heart, that organ must either dilate its cavities to receive the excess as it rushes into it or its fibres must give way. Cardiac rupture and death would be the immediate result.

Here we see the value and beauty of the part played by the "depressor" nerve above referred to, for when this centralization of blood pressure is felt at the heart, an impulse is sent up this nerve to the vaso-motor centre in the brain, and by producing paralysis of that centre the stimulus of the vaso-motor constrictors is lost, and there results dilatation of the capillaries, especially of those under the control of the splanchnic nerves. This dilatation permits a large retention of blood in the capillaries, and thus the overplus of blood at the heart with its excessive pressure is removed and death prevented. The great importance of this depressor nerve and its action as a safety valve is thus clearly brought out. Dr. Dixon (*loc. cit.*) tersely sets forth its action thus: "If the heart be surcharged with blood an *afferent* impulse is sent up the depressor nerve to the vaso-motor centre and an *efferent* impulse is sent down from it through the constrictor fibres of the splanchnic, paralyzing them, and dilatation at once takes place." Safety is thus brought where death was imminent. In this instance we see, as in many others, the conservative and self-protecting powers of the human organism.

That atropia is a powerful cardiac and respiratory stimulant has already been stated and is well known. Great use may be made of this important fact in its therapeutic application. In the administration of anæsthetics great trepidation is felt on the part of the giver and receiver of the agent, for no one can tell whether the patient may come out of its power in safety, or be landed in eternity while yet unconscious. It has been the habit of the writer, for years, to give a hypodermic injection of atropia—$\frac{1}{30}$ to $\frac{1}{60}$ grain—before using anæsthetics. He has not only had no cause to regret this practice, but has been highly pleased with it. Von Graefe recommends the same practice. It in no way interferes with the anæsthetic, but it does help to maintain the cardiac and respiratory functions while anæsthesia is present, and for some time after it passes off. I have often noticed in cases where great shock is present, and where it is desirable to anæsthetize the patient in order to operate, that a pretty full dose of atropia hypodermically given ten minutes before using the anæsthetic will bring up the fullness and force of the pulse, deepen and regulate the respiration; and this effect is not lost when the anæsthetic is brought to bear in its needed power to prevent suffering during the operation.

As a remedy in severe shock, where there is feeble circulation, cold extremities, pale surface,

and sighing or difficult respiration, we know of no agent equal in power and of as great value as atropia sulph. used hypodermically. The same may be said in reference to the collapse resulting from cholera, cholera morbus, or sudden loss of blood. I have seen cholera patients that had been given up to die rally in half an hour under the hypodermic use of $\frac{1}{30}$ grain of sulph. atropia, so as to be pronounced out of danger by those who had considered them as good as dead before its use. I know this is strong language, but I also mean all I say. These happy results are brought about by the power this agent has as a cardiac and respiratory stimulant and through its influence over the capillaries, through the vaso-motor system of nerves.

In some cases of sunstroke, where there is a marked tendency to apoplexy, and where the pulse is somewhat hard, but irregular, and the respiration is labored, and where there may be great doubt as to whether we should stimulate or use depressing agents, we may well remember that a severe shock has been rendered to the system, under which it is laboring, and that gentle stimulation of the nerve centres is perhaps the safer course. Then, if we remember the marked effects atropia has over the vaso-motor nerve centres, and its tendency to distribute the blood equally in all parts of the system, I think we will find in its careful use a most valuable and safe remedy. This effect may be had by repeated small doses of atropia, hypodermically given, until its effects begin to be apparent. In this class of cases alcohol is unsafe; venesection is dangerous, especially in drinkers. Atropia is, at least, safe, when discreetly managed.

Advantage may be taken of these effects of atropia in some cases of sunstroke. It is, however, not a remedy to be injudiciously used, or used without clear discrimination in these cases. Where there is a strong apoplectic tendency, shown by turgescence of the head, and a hard, full pulse, and heavy, deep respirations, this is not the remedy needed. But in many cases of sunstroke there is present an irritable stomach, nausea, vomiting, cool extremities, small, weak pulse, difficult respiration. In these cases the pathological condition is that of prostration, and the tendency to death is by asthenia, or swift failure of life from prostration. The nerve centres are overcome and death is imminent. In these cases it is the common practice to give alcoholic stimulants—generally a very good treatment, and one that has averted impending death in thousands of cases. But it has no doubt been the experience of many, that in some of these cases it is quite impossible to obtain the stimulant effects of alcoholics in any form, on account of the irritable condition of the stomach. No remedy is retained, and life ebbs away, while we stand powerless to secure the needed stimulant effects of any agent by way of the stomach.

In such cases, atropia given hypodermically has acted most kindly and beneficially. The irritability of the gastric organ does not prevent its administration or its stimulant effects. In a few minutes its stimulant power is made manifest by rendering the pulse fuller and steadier, and the respiration deeper and easier; the capillary circulation is restored to its normal balance, cerebration becomes healthy, and the danger point is so easily past as to be rendered less appreciable than would have been the case under the use of stimulants by the more common manner of administration.

These effects of atropia over the circulation and respiration are what render atropia so valuable in cases of poisoning by opium and its salts, and by muscarin, physostigma, aconite, etc. These have more or less direct tendency to depress the actions of the heart and lungs. Fothergill, at one dose, gave a grain of atropia sulph. to antagonize a lethal dose of opium, in tincture. This is giving a lethal dose of one deadly poison to destroy the effects of a lethal dose of another poison. This was an extreme case, and demanded extreme measures. The result justified the treatment. This case, however, should not stand out as one governing practice in every case of narcotism by opium, for the extreme dose of one grain of sulph. atropia is very deadly and dangerous. But a proper balance may be found in the use of these agents, so that one may antagonize the other, when the poisonous effects of either is observed. I believe Bartholow places the ratio of antagonism at atropia gr. j to morphia grs. xvj. It makes a good formula for hypodermic use.

Professor Frazer found atropia very efficient in restoring the failing circulation and respiration under the poisonous effects of calabar bean. Mr. H. A. Hobbs (*Compendium Medical Science*, July, 1872, p. 46) reports a case of severe poisoning by the ingestion of belladonna liniment. The manifestations of poisoning by this agent were extreme. He used calabar bean to counteract the effects of the belladonna. The effects were prompt and markedly favorable, and recovery occurred quite perfectly in a reasonably short time.

The common uses of atropia in diseases of the eye, and for neuralgia, and asthma, for its influ-

ence over peristaltic action of the digestive tube, and for its power over muscular fibre in general, we have not space now to enter upon. Furthermore, much of this would be needless, as all the profession are, no doubt, well informed as to these common uses of atropia.

A summary of what we have endeavored to set forth as the effects of atropia may be expressed thus:—

(*a*) It is easily administered; (*b*) is not an irritant to the stomach or tissues; (*c*) is a most powerful cerebral stimulant; (*d*) has special influence over the vaso-motor nerve centres; (*e*) is a powerful cardiac and respiratory stimulant; (*f*) and through these effects on the organic and inorganic system of nerves, is a most valuable agent in the profound depression resulting from many forms of disease, and from the shocks of injury and operations; and also, (*g*) available to prevent the serious results of anæsthesia; and (*h*) is one of the safest and best stimulants in some conditions resulting from sunstroke.

No agent in general use requires greater care and discrimination in its use, and no one will yield more happy results in well chosen cases. But it is capable of deadly mischief, as well as of great good.

THE FATALITY OF ETHERIZATION IN CHRONIC KIDNEY DISEASE.

BY JOHN B. ROBERTS, M.D.,

Lecturer on Anatomy and on Operative Surgery in the Philadelphia School of Anatomy.

In the MEDICAL AND SURGICAL REPORTER of April 29th, 1882, there appears the following sentence:—

"Concerning the administration of anæsthetics, especially ether, to patients suffering with any form of chronic kidney disease, there seems to be but one opinion, as expressed by all authorities, *i. e.*, that such procedure is, *as a rule, followed by fatal results;* and the weight of testimony confirms this assertion."

This assertion is so at variance with my own opinion, and with my understanding of the views of surgical authorities, that I desire to criticise it, although it was written by a personal friend.

In discussing the statement, I shall endeavor to prove, first, that such an opinion is *not* "expressed by all authorities;" second, that such procedure is *not*, "as a rule, followed by fatal results;" third, that the danger is *not* the same in "any form of chronic kidney disease;" and therefore, finally, that the weight of testimony does *not* "confirm this assertion."

Agnew says*, "Ether may be given with impunity to persons suffering with renal disease." Dr. Henry M. Lyman, of Chicago, the author of a well known monograph on anæsthetics, states, in a more recent publication*, that all diseases which diminish the energy of the heart and of the lungs tend to increase the dangers of anæsthesia, and that various nervous affections augment the risk. He does not, as far as I have found, refer at all to renal conditions affecting the result of etherization. Of course, the frequent association of heart and kidney affections might be raised as a reason for his omitting the latter; but if etherization in connection with chronic renal disease is followed, *as a rule*, by fatal results, such omission is censurable. I regret that I am unable at present to refer to his monograph on Anæsthesia, but the reference given is to a later publication, though possibly it may have been written earlier.

Gross's opinion, published, however, in 1872, is as follows:—"Certain diseases are usually regarded as contra-indicating the employment of anæsthetics . . . . but I have myself never allowed any affection whatever to stand in my way."† At this time Gross employed chloroform almost to the exclusion of ether.

Speaking of visceral diseases, Ashhurst asserts that anæsthesia is probably less dangerous in such cases than the performance of important operations without it; hence he does not think its use improper. ‡

Erichsen§ in speaking of chloroform, which he seems to prefer to ether, gives as a general rule, that whenever constitutional disease has not advanced so far as to contra-indicate operation, chloroform may be given. He also, however, calls attention to the fact that the most dangerous condition in which to administer chloroform is that in which, from renal disease, the blood is loaded with urea.

Under the discussion of cases in which chloroform is inapplicable, and should be given with hesitation and care, Druitt‖ speaks of brain, heart, and lung disease, but makes no mention of renal affections. His consideration of other anæsthesia is very short and does not refer to these matters. Bryant gives similar advice.¶ Holmes** only

* Surgery, vol. II, p. 283. Philada., 1881.

* International Encyclopædia of Surgery. Vol. I, pp. 412–415. New York, 1881.

† Surgery, vol. I, p. 565. Philadelphia, 1872.

‡ Surgery, p. 74, Philadelphia, 1878.

§ Surgery, vol. I, pp. 45, 46. Philadelphia, 1878.

‖ Surgeon's Vade Mecum, pp. 714 and 715. London, 1878.

¶ Surgery p. 957, American Edition. Philadelphia. 1881.

** Principles and Practice of Surgery. London. 1875. p. 873.

discusses heart affections, and believes it safer to operate with than without anæsthesia. The article on anæsthetics, by Lister, in Holmes's System of Surgery, was written too long ago to be adduced by me as evidence, but in the additions made by Dr. J. C. Reeve, in the American Edition, issued this year (1882) I find the statement * that the urine should be examined before etherization, whenever practicable, because in diseased conditions the eliminative power of the kidneys is embarrassed, and "under these circumstances the most unfavorable results are likely to follow the administration of ether."

Turnbull does not mention † renal diseases in the section on "Cases in which ether should not be employed as an anæsthetic" (p. 27); but it is probable that reference will be made to this matter in subsequent editions, for I know he regards kidney troubles as important in this connection.‡

It will thus be seen that Reeve is the only surgical authority who speaks forcibly of the *positive* character of the danger of death from ether inhalation in kidney disease. He is, I admit, a very high authority, but he does not assert that the danger is so great as to warrant denial of anæsthesia in capital surgery. In fact, he does not raise the question. It appears, from the context, as if his words were made very emphatic rather because he desired to enforce caution, than because he feared that actual death would occur.

Emmet § lays stress on the danger of etherization in such instances, but does not discuss the subject freely, nor give advice as to the course to be pursued in *protracted* operations. I have not taken the time to hunt up and translate extracts from the German, French, or Italian authorities, because I feel sure that the opinions cited correspond with those of the majority of continental writers. My own opinion is that organic renal disease is a very undesirable complication of anæsthesia, and I have elsewhere said ‖ that "lungs, heart, and urine should always be examined before the administration, for, though lesions here should not preclude anæsthesia when necessary, the knowledge of such lesions would enforce caution and care."

This is very different from the statement that anæsthesia in cases of chronic kidney disease "is, as a rule, followed by fatal results."

Ether is often administered carelessly and without proper preliminary examination of the patient, and some practitioners are perhaps unaware of the propriety of a urinary investigation. Still, it is doubtful whether such would be convinced of this propriety or necessity by an unqualified assertion that carried with it the impression of being the result of a not impartial judgment.

2. I next shall try to prove my position that such procedure is *not*, as a rule, followed by fatal results.

Turnbull refers * to statistics which estimate that in Philadelphia there were, up to 1878, 34,980 ether administrations, with no recorded primary death and only one recorded secondary death. Lyman quotes the statistics of Andrews, giving 92,815 inhalations, with but four deaths.†

Chronic disease of the kidney is an exceedingly common affection, especially among those subjected to privation and exposure, and those addicted to alcoholic stimulation. These two classes are particularly liable to injury and disease requiring surgical attention under anæsthesia. It is impossible to believe that in nearly one hundred thousand instances of etherization (even admitting that some were repeated inhalations by the same person), there were only enough patients afflicted by chronic kidney disease to furnish four deaths, if it is true that etherization in such cases is, as a rule, followed by death. Even if we admit that the deaths suppressed or unreported would be sufficient to increase the number given tenfold, it is still impossible that there could be so little renal disease as to cause so few deaths.

It is evident, therefore, that fatal results do *not*, as a rule, follow etherization of patients suffering with renal disorders. It is scarcely necessary to state that nearly every surgeon of large experience has had or seen patients known to have chronic nephritis, who have been etherized with impunity.

3. Those forms of chronic kidney disease which interfere most with elimination would undoubtedly be the most dangerous complications of ether anæsthesia; hence it is not logical to state that patients suffering with *any* form of chronic kidney disease are liable to show fatal symptoms.

4. Enough has been said, I think, to prove to

* Vol. III, p. 553.

† Advantages and Accidents of Artificial Anæsthesia. Philadelphia. 1879. p. 27.

‡ See Philadelphia *Medical Times*, June 4th, 1881. Discussion on Roberts's paper on Ether Death.

§ Gynæcology, 2d Ed., 745-746.

‖ Philadelphia *Medical Times*, June 4, 1881.

* Op. cit., p. 48.

† International Encyclopædia of Surgery, Vol. I, p. 422.

the reader that the weight of testimony does *not* confirm the assertion that "such procedure is, as a rule, followed by fatal results;" but that, on the contrary, the testimony of evidence and authority is to the effect that fatal results rarely follow the administration of ether to patients with chronic kidney disease.

That renal affections *increase* the risk of anæsthesia, I have no doubt, and I feel that anæsthesia is invariably a stage of some danger, and should be looked upon in that light by all administrators. The withholding of ether inhalation however, from patients with renal trouble, when painful operations are necessary or desirable, would be, in my opinion, unjustifiable; because the risk is comparatively slight. The surgeon should always be cognizant of the existence of such a complication; but it need not deter him from etherization, though it should make him exceedingly cautious and watchful.

The sweeping statement of the writer criticised is liable to be used unjustly against professional men, in cases where death occurs under ether so administered. It should, therefore, be refuted, because it has the weight of authority against it, and is not, in my opinion, justified by examination of the evidence.

One year ago I collected* eighteen cases of ether death reported between 1873 and 1880, and since that time there have come to my knowledge three or four additional instances. In a number of these the autopsy showed kidney changes, and such alterations would probably have been found in others if looked for. Therefore, though I might be willing to admit that in ether death renal disease is, as a rule, found, I cannot allow to pass unchallenged the statement that the administration of ether, in patients suffering with any form of kidney disease, "is, as a rule, followed by fatal results."

* Philadelphia *Medical Times*, June 4, 1881.

ANEURISM OF AORTA.

BY DR. BEAN.

Read before the Philadelphia Laryngological Society.

GENTLEMEN:—In November of 1880 I presented before the members of this Society a specimen of a concealed aneurism of the arch of the aorta pressing upon the left recurrent laryngeal nerve and producing paralysis of the left vocal band in abduction, together with a history of the case and notes of the *post-mortem*. I now have, in connection with Dr. Cohen, a somewhat similar case to present, but am more fortunate in being able to report a more favorable result.

Jacob S., a German, aged 70, by trade a carpet weaver, applied to Dr. Cohen on the 17th of May last, and in his absence was examined by me, for a hoarseness which had lasted since the preceding September, and for which he had been unable to find any relief. He gave the following history: On the 17th of September, 1879, after lifting very heavy rolls of carpet, felt, as he termed it, "a peculiar heavy stroke of the heart and a sense of extreme weakness, so that he came near fainting;" but as this soon passed off he paid no further attention to it.

On the 25th of September, one week later, he felt two strokes similar to the first. Soon after, how soon he does not remember, his voice began to grow hoarse, and gradually grew worse until I saw him, when there was slight dysphonia and voice a falsetto; this latter being due, according to Mackenzie, to the unequal vibrations of the vocal cords, and the abnormal way in which they approximate. For several months, even during the warm weather, he had suffered very much with cold feet; with this one exception his general condition was good; at no time had there been any cough or pain in the throat; no difficulty in swallowing: and up to the time of the impairment of his voice he had been comparatively well.

Laryngoscopic examination revealed paralysis of the left vocal band in adduction; the other appearances of the larynx were normal.

On a physical examination of his chest I found inspiration shrill at junction of the second sterno-costal intercostal articulation, as though from the pressure of some intra-thoracic tumor upon the primitive bronchus. Marked dullness over the same region. Could detect a blowing sound about one-half to three-quarters of an inch to the left of the sternum in the second intercostal space, synchronous with the ventricular systole. No thrills could be detected in the infra-clavicular regions. There was no difference in the size of the pupils of the two eyes. The pulse was seventy per minute and feeble; the left radial pulse was scarcely perceptible and about one-fourth of a beat slower than the right. This was also the case with the left brachial artery.

He was examined very carefully the following day, by both Dr. Cohen and myself. Examination of his urine revealed the presence of sugar in considerable quantity; this, Dr. Cohen suggested, was due to reflex irritation on the floor of the fourth ventricle, from the intra-thoracic pressure upon the branches of the pneumogastric nerve. The diagnosis was aneurism of the arch

of the aorta producing paralysis of the left recurrent laryngeal nerve; and the following treatment prescribed: absolute rest in the recumbent position; diet restricted to six ounces of solid and the same amount of liquid food in the twenty-four hours, the latter consisting principally of wine, and iodide of potassium in increasing doses, to ninety grains per diem.

On May 20th, two days after treatment was begun, the pulse was sixty per minute and feeble, while the left radial pulse could not be felt every beat.

On May 22d the left radial pulse was very perceptible, and his feet felt warm and comfortable.

This plan of treatment was followed until the first of July, when, at his earnest solicitation, he was allowed to sit up in an easy chair. At this time the blowing sound in the left second intercostal space could scarcely be detected and the left radial pulse was very distinct. Not doing so well out of as he did in bed, I tried to persuade him to return to the old treatment; this he refused to do, since which time he has been without medical attendance. An examination of his larynx at this time failed to show any change from the condition of the first visit, though the voice had improved in quality and power. An examination made on the 27th of January, 1882, more than six months after treatment ceased, showed no change in the appearance of his larynx; the left radial pulse scarcely perceptible; inspiration shrill in the left second intercostal space, though no blowing sound could be detected. In opposition to my advice he has resumed his work, which requires at times considerable effort, such as lifting heavy rolls of carpet weighing from 140 to 175 pounds each. Although at the time I last saw him, his voice was weak and a falsetto, he assured me that at times it was as good as it ever was. The presumption in the case is that the nerve is adherent to the anterior surface of the artery and still subject to the compression.

Saturnine Neuralgia.

Contrary to the opinion expressed by *Tanquerel des Planches*, that neuralgia, in the true sense of the word, is never met with in cases of lead poisoning, *Dreyfuss* (*Des névralgies saturnines, Par F. Dreyfuss, La France Méd.*) gives a description of two such cases. In the one the neuralgia affected the ulnar nerve, in the other the sciatic nerve. In both the neuralgia existed symmetrically on both sides, as has been ob served lately to happen also frequently in persons suffering from diabetes. In the two cases reported by Dreyfuss the urine contained no sugar.

Hospital Reports.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINIC OF WILLIAM PEPPER, M.D.,

Professor of Clinical Medicine in the University of Pennsylvania.

Reported by William H. Morrison, M.D.

THE GALL-BLADDER FILLED WITH GALL-STONES, WITHOUT CAUSING MARKED SYMPTOMS—ASCITES, TAPPING WITH A CAPILLARY CANULA—ACUTE RHEUMATISM, ACUTE ENDO PERICARDITIS.

Gentlemen:—The specimens which are now before you were taken from a patient who died a short time ago. He was fifty years of age. He evidently came from a family with poor vitality. Both parents died in early middle life. His mother died from galloping consumption. He was himself married and the father of sixteen children, of whom twelve are dead and four are living, apparently healthy. A number of the children died from consumption. The whole family history is full of evidences of inherited tendencies and proofs of defective vitality.

When we examine his personal history, we find that he had suffered from the ordinary specific fevers of childhood. He had, in addition, always been subject to flatulent dyspepsia, but he did not speak of any attacks of acute pain, nor of any symptoms of habitual biliousness or derangement of the liver. He was much exposed in 1864, while in the army. At that time he caught a cold, and since then he has had a hacking cough. During the past six months the cough was worse, and was accompanied by expectoration and pain in the chest. For the last few months he rapidly ran down in flesh and strength, had fever, night sweats, and the physical signs of advancing softening in the lungs, with the formation of cavities, going through all the stages of a rapidly progressive phthisis, from which he died.

The post-mortem examination revealed a large cavity at the apex of the left lung, another at the base of the right lung, and a third about the middle of the left lung. Smaller cavities were found scattered throughout both lungs. There were extensive pleural adhesions, particularly on the right side. The base of the right lung was partially crepitant. We have, here, the history and ordinary symptoms of progressive, destructive, phthisis. I did not bring the lungs before you, as they exhibit, merely in the extreme, the ordinary lesions of this disease.

I have here the liver, for the lesions which it presents awaken questions of great practical interest. This organ is a little under the normal size. It is thicker than natural, and a little wider. It is distinctly paler than normal and both the naked eye and microscopical examinations show fatty degeneration. The capsule is not adherent nor thickened. It strips off readily, showing that there is little or no cirrhosis, although he at one time drank a good deal of liquor.

You will often find fatty degeneration of the liver in phthisis. It is not the only organ that is apt to undergo this change. It also occurs in the kidneys and heart, but the liver is particularly

prone to fatty degeneration. The reasons which may be assigned for this are various. Fatty degeneration is an evidence of defective oxidation. Whatever interferes with the full supply of blood or the carrying of the normal amount of oxygen favors the change in which the more complicated nitrogenous elements, which go to make up the cells, are replaced by the lower grade of hydrocarbonaceous elements which we find in fatty degeneration. The fact that there is in phthisis an habitual interference with the oxidation of the blood, is a distinct cause of fatty degeneration.

Secondly. Patients with phthisis very frequently use large quantities of fats and alcohols, and we know that this leads to the deposition of large amounts of fat in the tissues. When this fact is taken in connection with the depressed state of nutrition, and the inability to maintain the normal type of the tissues throughout the body, you will not wonder that in phthisis we have a tendency to the deposition of fat in place of the normal elements of the tissues. This is most marked in the liver, because it is to this organ that the hydrocarbonaceous matters pass first, from the digestive canal.

There is another abnormal condition about this liver, and one which we were not led to suspect. When I feel the gall bladder, it seems to be full of gall stones. Probably even at a distance you will recognize that the gall bladder has a pearly appearance. In health, the gall bladder presents thin walls, and the bile showing through gives them a dark color. Here, however, the peritoneal covering is evidently thickened. The main bile ducts are patulous, as I can by pressing on the fundus, force out a quantity of healthy looking bile. At the mouth of the common duct I find a large gall stone, and it is past this stone that the bile escapes. I shall now open the gall bladder, so that we can see its interior. I find a large number of gall stones. (There were fifty-one, varying in size from about twelve grains to one grain.) The largest is the one at the opening of the common bile duct. It does not lie directly in the line of the duct, but in a little pouch to one side. Let us first examine the lining of the gall bladder. It is distinctly thickened, but does not show any evidences of ulceration. It is, perhaps, a little roughened, but this has not gone on to ulceration, and the formation of pus. The bile is a little more glutinous than normal, due to some increase in the mucous secretion from the lining membrane.

Now what has caused these gall stones, and why did this man pass so many years without experiencing the least trouble, while others with, perhaps, but one or two little stones, have their lives rendered miserable, suffer attack after attack of pain and not rarely lose their lives in the attempt to get rid of the obstruction?

The frequency of gall stones is connected with at least two different conditions. One of these is the condition of the bile passages. An inflammation in the bile ducts, or in the gall bladder, or in the common duct, causes swelling of the mucous membrane, and retards the flow of bile. The inflammation of the mucous membrane forms a large amount of thick, gluey mucus, and this mixes with the bile, which gradually becomes inspissated, and little nuclei form, around which deposits occur in concentric layers, and gall stones are formed. This sometimes takes place in the gall ducts in the body of the liver. I have counted as many as a hundred and fifty in the branches of the gall duct.

The second condition is alteration in the bile itself. In consequence of some constitutional condition and disturbance of the function of the liver, the bile is thick, and viscid, and rich in the inorganic coloring matter, which for the most part forms the nuclei of these calculi. A little granule of coloring matter serves as the nucleus, around which fresh layers are deposited. I shall now make a section of one of these gall stones and pass it to you, in order that you may see how they are formed. You will observe the nucleus, consisting of a little stellate body of pigment, almost jet black in color; around this there is a paler layer, formed of cholestrin, and then there are subsequent layers of pigment. The formation of gall stones in the present case has been the result of this latter condition. We have them occurring in a gall bladder comparatively healthy.

We therefore see that gall stones may result from some morbid state of the biliary passages, or from an abnormal condition of the bile which leads to the formation of calculi while the passages remain almost normal. Once formed it is a matter of circumstance how many there are, what shape they assume and to what size they attain. I have counted as many as one hundred and fifty, and I have seen the gall bladder contain a single stone as large as an egg. When there are many they acquire a peculiar shape. They become polyhedral with a number of surfaces rubbed smooth by friction. Sometimes the gall bladder will feel as if it contained but a single mass, but on opening it a large number of stones may be found packed so closely together as to leave no room for the bile.

I mention the faceted condition, as it has an important bearing on the prognosis. I shall first describe the manner in which you look for gall stones. Mix the fæces with a large quantity of water and thoroughly stir with a stick. Then place a sieve over another vessel and pour the fecal matter on it, stirring it constantly and washing it through with more water. If a gall stone has been passed you will find it remaining on the sieve. If it is a rounded body we may hope that it was the only one in the gall bladder, and you may make a favorable prognosis as regards future attacks. If, however, you find one or more having these little facets, you may be satisfied that there has been more stones in the gall bladder, and the chances are that there are more present and that the patient will suffer successive attacks of pain until they are all discharged.

When you ask why this man with such a large number of gall stones, so different in size, some small and others comparatively large, did not exhibit spells of biliary colic, what shall I answer? It is possible that some have passed. It is not improbable that the attacks of flatulent dyspepsia may have been associated with the passage of biliary calculi. It is a mistake to suppose that the escape of gall stones is always accompanied by the severe symptoms usually described. It is customary to say that the symp-

toms of the passage of a stone through bile ducts are, violent pain in the region of the gall bladder, shooting through to the back and up to the shoulder, nausea and vomiting, followed that evening or the next morning by jaundice, high-colored urine and putty-colored stools. The attack passes off, leaving behind some tenderness in the region of the gall bladder. These are the symptoms of the passage of a large stone. Time after time have I found gall stones after attacks of sharp pain in the epigastric region, unattended by the slightest jaundice or the presence of bile pigment in the urine or its absence in the stools. In these cases the gall stone has been so small and passed so quickly along the gall duct that it has simply given rise to a transient attack of pain, but the retention caused has not been of sufficient duration to cause jaundice ; or else, just as we have here seen, the bile may have been able to escape along the side of the stone, so that there was not at any time complete obstruction. Last spring I obtained from a patient who had suffered from a series of attacks of pain in the epigastrium, which had been called wind colic and which had not been accompanied by jaundice, twenty or twenty-five stones in three or four attacks. I do not know how many stones may have been passed during the two years that she had suffered from these attacks. Whenever a patient complains of obscure pain in the region of the epigastrium, the fæces should be washed and examined in the manner I have described, for it may be a case where small gall stones are passed through a large and healthy duct without giving rise to obstruction sufficient to cause jaundice. In some people the gall bladder is very tolerant of these foreign bodies, while in others a single calculi will cause repeated attacks of colic. I have seen a patient with a single smooth, round calculus who would have, at very short intervals, severe attacks of pain, followed by jaundice. The stone would slip back into the gall bladder and the attack would be relieved. I think I saw him in at least a hundred of such attacks. The stone at last became wedged in the gall duct so tightly that it could not be dislodged, and the patient died. At the autopsy I found a single large, smooth stone. In other cases, as in the one before us, the gall bladder may be filled with stones and yet the patient never complain of any symptoms of hepatic derangement. This tolerance may, perhaps, be explained by the fact that the stones are formed slowly in a healthy gall bladder, in consequence of a morbid condition of the bile, and thus the parts become accustomed to their presence, until finally they remain as though they were normal parts of the body. Still it is unusual, and I am glad to have had the opportunity of calling your attention to it, and of remarking upon the singular differences that exist in regard to the symptoms of the formation of gall stones in different cases.

Paracentesis with a Capillary Canula.

I shall now ask your attention to a very simple mode of performing paracentesis in ascites.

This lady has serious organic valvular disease of the heart. She formerly had considerable albumen in the urine, and occasionally a few tube casts. She has great œdema of the extremities, and enormous ascites. Her habits are perfectly unexceptional. Her father is living and healthy. Her mother has chronic bronchitis. There is no hereditary disease. She is married, and has had two miscarriages, at the end of the fourth month. I have inquired carefully, but have been unable to find any evidence of infection of the system. Here you see great distention of the abdomen. There is fluctuation on palpation. There is dullness in the dependent portions, resonance in upper part, and alteration of the position of dullness by changing the position of the patient's body. In other words, we have a large effusion, free to move, in the peritoneal cavity. With this there is great œdema.

Under treatment in the hospital, last fall, she was immensely improved. She was placed in bed and given a diet of skim milk for three or four weeks. She was also put upon the use of iodide of potassium and digitalis. Under this treatment her heart came down to a regular steady beat. It is now 80 in the minute, and perfectly regular. Of course, the murmur (a double mitral and aortic systolic) remains. The albumen in the urine has disappeared, showing that it was a congestive albuminuria and not due to true Bright's disease. The œdema of the legs also vanished ; but while this was the case, the girth of the abdomen diminished only a few inches. We are now face to face with this chronic peritoneal effusion, which we find somewhat difficult to explain, in the absence of any kidney trouble. It cannot be due to nervous stasis, a result of cardiac weakness, for then the œdema of the legs would not have disappeared. This effusion must result from some trouble within the abdominal cavity. Of course, our suspicions are that it is associated with an affection of the liver ; but we cannot determine the condition of the liver, until we have withdrawn the fluid.

A few days ago I drew off some of the fluid for chemical and microscopical examination. This is the report: "Amount of fluid examined, one pint ; light greenish yellow in color ; specific gravity, 1.020 ; alkaline reaction ; it contains albumen and chlorides, but no urea, no sugar, and no ovarian cells." To-day I propose to repeat this operation, on account of the cardiac trouble. I do not wish to rapidly remove the support which this effusion gives to the abdominal vessels, as would be the case if I used a large trocar. I propose to use this capillary canula and trocar (Dr. Southey's). It consists of a delicate steel trocar, passing through a silver tube which has numerous little fenestra in its sides. A little plate of silver slips over the tube and is held in place by a cap which is screwed in this way, so that there is no danger of the canula slipping into the abdominal cavity. I shall now attach this small rubber tube to the canula, and pass the stilet through the side of the rubber. After freezing, with ice, the point at which I intend to make the puncture, I introduce the trocar and canula, place the lower end of the rubber tube beneath the surface of the water, withdraw the trocar and slip the rubber tube far enough on the canula to cover the little opening made in its side. This will draw off the fluid at the rate of a few ounces an hour. Paracentesis performed in this manner is as simple as a

hypodermic injection. In cases of extensive pleural effusion, where you fear sudden death from a rapid removal of the fluid, this offers an excellent method of operating. In those cases of pleural effusion in which death has occurred during the removal of the fluid, I think, from the reports of the cases, that it was due to too rapid abstraction of the fluid, thus bringing a sudden strain on the lungs.

I shall allow her to remain in bed, and when the abdomen is entirely emptied, I shall have an opportunity of percussing the liver, and determining whether or not my suspicion of some chronic trouble of that organ is correct.

Acute Rheumatism Complicated by Acute Endo-Pericarditis.

We have been receiving a number of Russian refugees lately. They have been unable to speak any dialect with which we are familiar, and we have, therefore, been obliged to diagnose every case by physical exploration.

This very nice-looking lady came in yesterday, evidently suffering with acute inflammatory rheumatism, as you can see at once, by glancing at the left wrist joint. This is like studying the diseases of children and animals. You will often come across cases where, either from the condition of the patient or his inability to speak your language, you will have to depend on the physiognomy, direct exploration of organs, and the use of instruments of precision, in order to make the diagnosis. The wrist joint is not much swollen, but the way in which she holds it is perfectly characteristic. Her temperature is 101.6°. There is a decided mitral systolic murmur, quite loud and rather coarse, supposing it to be recent. There is no aortic trouble. In addition to the mitral systolic, I hear a faint mitral pre-systolic murmur, showing that there is a little roughening as well as insufficiency of the mitral valve. With this there is quite a distinct, churning, friction sound at the point of the heart. We have, therefore, an endo-pericarditis. Pressure over the heart is painful. The hands and the joints of the lower extremities are also affected with the rheumatic inflammation.

What is the treatment? We have moderate fever, acute rheumatic poly-arthritis, and acute endo-pericarditis. The tongue is dry and brownish in the centre. In cases of this kind, where the heart is already affected, I do not like to depend upon salicylic acid or the salicylates. My observation has been adverse to their use in complications of a rheumatic character. In simple acute rheumatism (rheumatic fever with poly-arthritis), I like to try the salicylates, and I give them a fair trial for a few days. If they do not then do good, it is not worth while to continue their use.

In this case the fever is moderate, and does not constitute a serious complication. As long as the fever is under 103°, it is of no consequence. The worst complication is the cardiac trouble, which, unless relieved, is going to leave this woman crippled for life. We must resort to such remedies as will, as quickly as possible, affect the heart. I therefore placed this woman upon calomel, opium and digitalis, giving her quinine, in moderate doses, by the rectum. She has received eight grains three times a day, dissolved, by the aid of a few drops of dilute sulphuric acid, in three ounces of liquid. When necessary, it was guarded by a few drops of the deodorized tincture of opium. She was given the following pill:—

℞. Hydrarg. chloridi mite,
Pulv. opii,
Pulv. digitalis, āā gr. ¼. M.
Ft. pil. No. 1.
Sig.—One every four hours.

This will, in the course of four or five days, slightly touch the gums, which is the condition I wish to produce. Over the cardiac region I shall place a blister, four inches square, followed in a few hours by a poultice, and afterwards dressed with diluted resin cerate (resin cerate, 1 part, cosmoline 2 parts). The affected joints will be painted with iodine, morning and evening, and wrapped in raw cotton or wool. She will receive a light diet of gruels, broths, and milk diluted with an equal part of water. Of these she can have as much as she will take. She may also have a little weak lemonade. It will be interesting to watch the course of this endocarditis. Her general appearance is more favorable than we might have expected. The moderate fever and the absence of nervous complications justify us in hoping that we shall overcome the cardiac trouble.

Medical Societies.

PHILADELPHIA LARYNGOLOGICAL SOCIETY.

Stated meeting, held at Dr. Isaac Barton's, No. 128 South Fifteenth street, on Friday evening, March 24th, 1882. Dr. J. Solis Cohen in the chair.

Dr. John H. Musser exhibited a case of Primary Laryngeal Tuberculosis, of which he gave the following history:—

James Toole, æt. 22, weaver of upholsterers' goods. Smokes moderately: habits good otherwise. Nine months ago hoarseness began and gradually increased, so that, on the occasion of his first visit to me, March 1st, 1882, could not speak above a whisper. There was no soreness, and his general health was very good. Six weeks previous to the first visit he first noticed soreness in the larynx, and in a short time speaking, coughing and swallowing became very painful. The soreness continued as a raw feeling; cough was hacking at times but generally loose, with mucous and muco-purulent expectoration. At times he suffered from dyspnœa; it was worse when going to bed. He lost flesh, and his general health failed; he never had fever. Laryngoscopic examination revealed a congested epiglottis, œdematous false cords, swelling of the mucous membrane of the arytenoid cartilage, with possibly ulceration of the left cartilage. True cords were congested.

Applied, by insufflation—

℞. Iodoform, ʒj
Morph. sulph., grs. v
Pulv. acaciæ, ʒiij. M.

Occasional blister externally. Pain relieved by

the application so that he could speak and swallow without any discomfort; appetite returned, gained in flesh, and his general health improved. Internally took ol. morrhuæ cum syr. calcis, lacto-phos.

Remarks were made upon the case by Drs. McCoy, McCracken and Cohen. The latter observed that the peculiarity in this case was the disease commencing in the arytenoid folds and extending upward.

Dr. Isaac Barton read a paper on "The Glycerole of Ergot in Chronic Hypertrophy of the Tonsils."

In the discussion which followed Dr. Sajous stated that he had tried both ergotin and iodine by injection into the gland, without result. He found that the injection would frequently run out of a lacuna.

Dr. Cohen stated that his success with this form of treatment was not favorable, and that he had some fear of it. Of late years he has been using the galvano-cautery with good results.

Dr. A. W. McCoy has for some years made use of London paste, with which he has been successful.

Dr. Isaac Barton, in closing, remarked that he had previously tried both iodine and ergotin without favorable results, as the injected liquid frequently escaped by a lacuna, but that this did not occur with the glycerole of ergot.

GEO. Y. MCCRACKEN, *Sec.*
612 *N.* 13*th St.*

EDITORIAL DEPARTMENT.

PERISCOPE.

Plastic Splints in Surgery.

Dr. Samuel N. Nelson presented an inaugural thesis on this subject to the Faculty of the Medical Department of Harvard University, *Annals of Anatomy and Surgery*, in which he describes the mode of preparation of the various plastic splints.

Starch Bandages were introduced in 1834, by Baron Seutin, of Belgium. The starch is prepared for use by boiling in water a few minutes, and should be of the consistency of that used by laundresses. The whole limb is enveloped in a layer of cotton wadding, which is thickly laid along and over the osseous prominences; a bandage saturated with thick starch is then firmly applied, and others added, according to the strength required. The whole is completed by starching the outside of the last bandage. Until the starch is thoroughly dried, which usually takes from thirty to forty hours, owing to the amount of moisture necessarily included, a temporary wooden splint may be applied to prevent displacement as far as possible. The drying may be somewhat hastened by the use of hot sand bags. The starch splint is light and inexpensive, and the materials are always at hand. It is, however, sticky in manipulation, and, to give sufficient firmness, usually requires stiffeners, such as pasteboard, hoop iron or wire. These may be added to any of the plastic splints, but are seldom required with plaster, and only when much additional strength is necessary.

Compared with the plaster splint, starch has the disadvantage of hardening only after many hours, instead of a few minutes, and requiring extension until dry. And, as it contracts in drying, it is not so safe.

Dextrine.—Dextrine, which is preferred to starch by Velpeau, and which is in many respects superior to it, is a substance obtained by the continued action of diluted sulphuric acid upon starch at the boiling point. It is prepared by thoroughly mixing with it spirits of camphor or brandy, in the proportion of ten to six, and adding four parts of warm water, when the solution will be about the consistency of molasses. The application is similar to that of starch.

Glue and Chalk.—The glue and chalk bandage is recommended by Bryant, who uses equal parts of gum-arabic and precipitated chalk, made into the consistency of thick paste by the addition of boiling water gradually stirred into it. This becomes firm sooner than starch, and is more solid.

Glue.—The glue bandage has been adopted by Mr. C. de Morgan, in the Middlesex Hospital. He uses the best French glue, dissolved in water, to which alcohol is added to induce more rapid drying. The application is similar to that of the starch bandage.

Glue and Oxide of Zinc.—Dr. R. J. Levis, of Philadelphia, introduced to the American Medical Association, in 1876, a dressing made of ordinary glue and oxide of zinc, and said that the glue, by this means, hardens with rapidity. "Too much oxide of zinc must not be added, lest it make the splint brittle and liable to crack." Any kind of texture can be used with the plastic material. This makes a light, neat, firm dressing, and where not much tendency to displacement exists, as in fractures of the forearm, is desirable. It sets slowly, however, as compared with plaster, is less porous, and contracts considerably in drying.

Paper.—Paper splints also serve a useful purpose. They are made by soaking pieces of shaped pasteboard and moulding them to the limb, around which are wrapped strips of stout paper, wet with water or with starch. It is less strong than the glue and oxide of zinc bandage, is slow in drying, and only exceptionally to be recommended.

Silica.—The silica bandage is made of the silicate of potash, or soda, dissolved in an excess

of caustic alkali. The late Dr. T. B. Curtiss, of Boston, reported in the Boston *Medical and Surgical Journal*, for June 28th, 1877, that the silicate of potash is preferable to the soda salt, which requires very long to dry. A coating of the solution is applied with a brush to a dry roller bandage over the limb, and two or three more layers are added, to give sufficient strength. The solubility of the silicate in water is an advantage, for it renders the removal of the bandage easy. It dries quicker than starch, but less quickly than plaster. It is lighter than plaster, but contracts in drying, and is not so safe. It is also very sticky and disagreeable to manipulate.

Tripolith.—Prof. Von Langenbeck recommends tripolith for surgical purposes. It consists of lime, silicon, and oxide of iron. It hardens sooner than plaster of Paris, and when once dry and hard never absorbs any moisture. Dr. Nelson has experimented with this article, and does not find it possessed of the advantages claimed for it.

Plaster of Paris or gypsum, the hydrated sulphate of lime, is prepared for plastic use by slowly heating it to between 212° and 392° F., to drive off the water of crystallization. It combines with water, forming a hydrate, and crystallizes or "sets," becoming in a few minutes quite firm and hard. The plaster must be of fine quality, such as is usually furnished for dental use, freshly calcined and carefully protected from the absorption of moisture from the atmosphere. The kind of cloth employed is of importance, both for the immediate and ultimate success. It must be sufficiently strong and of such a texture as to take up and retain plaster easily. After many experiments with different kinds of cloth, Dr. Marcy has decided that the cheap bleached cotton cloth used for printed calico, meets more of the demands than any other, if used before it has received the dressing. To procure cloth at this stage of manufacture one must go to the bleacheries. It is then free from the vegetable oil with which each fibre was covered, and has not received the filling of earthy and starchy compounds necessary to give the firmness required in finishing, and is equivalent to the surgeon's absorbent cotton. It is the right texture to take up plaster and retain it. It gives the maximum of strength, and when applied it forms a kind of felt, which does not crack, but rather wears out if subjected to friction, as over the heel.

Strangulation, and even fatal gangrene, have been known to follow the improper application of fixed dressings; but this should not prevent their use when their advantages are so very apparent. If it does occur, gangrene is sudden and unheralded.

The patient should be visited within twenty-four hours, and careful inspection of the limb be made. The bandage should be removed at once if there s swelling of the fingers or toes left exposed; if they become purple, benumbed, or cold, the circulation is impaired, and there is compression. Even without these symptoms, continued pain is sufficient indication that something is wrong.

In regard to the time when a plaster splint should be applied, although many able authorities prefer to wait until after the swelling has subsided, yet there is abundance of evidence, from Larrey, Velpeau, Seutin, Erichsen, St. John, and Marcy, to show that it can be applied immediately after the injury, not only with perfect safety, but with better results. The plaster dressing is applicable to all fractures of the long bones, of the clavicle and ribs, and to acute fractures of the spinal column.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——The Special Therapeutic Value of Hyoscyamine in Psychiatry. By C. H. Hughes, M.D., St. Louis. A reprint from the *Alienist and Neurologist*, April, 1882.

——Observations on Surgery in Children. By Edward Borck, M.D., St. Louis, Mo., comes to us as a reprint from the St. Louis *Medical and Surgical Journal*. June, 1882.

——Observations on Hemiplegia. By A. D. Rockwell, A.M., M.D. Reprint from *Medical Record*, April 29th, 1882. This is a practical paper, based on the observations made by the author during an extensive experience.

——Galvano-caustic Method in Nose, Pharynx and Larynx. By Dr. J. Solis Cohen, of Philadelphia. This pamphlet, received with the compliments of the author, contains the address delivered by him before the International Medical Congress.

——Preliminary paper on the determination of a standard of color-sense for reflected color by daylight; with a graphic description of the individual limits and average results of sixteen cases. By Charles A. Oliver, M.D., of Philadelphia. Reprint from the *Archives of Ophthalmology*. Vol. xi, No. 1. March, 1882.

——Carotid Compression and Brain Rest. By J. Leonard Corning, M.D., member of the New York Neurological Society. This is a small pamphlet of 39 pages, intended mainly to illustrate an instrument devised by the author, to combat sleeplesness and other conditions where there is too much blood in the brain, by means of compression of the carotids.

——The subject of the diagnosis of Pott's Disease of the Spine before the stage of deformity, is treated of in a reprint from the Boston *Medical and Surgical Journal*, by Dr. V. P. Gibney, of New York city. The writer has had a large experience in this disease, and the cases he records are instructive and merit the attention of surgeons.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

A MODEL INFANT ASYLUM.

Few subjects interest the student of public medicine more than the efforts made in various directions to preserve infant life. The special value which attaches to these projects arises from the excessive mortality at that period of life. The first year is by far the most dangerous of any, and the first decade counts three times as many victims as any other. Hence, if we ever expect to bring public health up to what it should be by our theories, we cannot devote too much attention to the hygiene of infancy.

The statistics of all countries show that the percentage of deaths among illegitimate is very markedly higher than among legitimate children. Hence, the former more particularly demand the early attention of the hygienist and philanthropist—for we hope no one who reads this will be found so bigoted and hard hearted as to say that these helpless creatures are the less deserving of care because of the misfortune or sin of their mothers.

This increased mortality is shown, on investigation, not to depend in any way on greater inherent feebleness in these infants—if anything, they are rather more favored in physical, as they often are in mental endowments, than those born in legitimate unions—but to the lack of proper care to which they are subjected, owing to the circumstances of the mother. They are often exposed after birth, or the surroundings of parturition are injurious. Hence no charity could be more called for than one which would diminish the loss of life by preventing these desertions.

Of the various institutions known to us which aim at this result, the New York Infant Asylum appears to us to be based on the most judicious principles. An infant is received, at birth or soon after, with its mother. The latter should accompany it, not only to supply the infant its natural food, but for the moral influence which will be exerted upon her. The names of both mother and child are regarded as absolutely confidential; each is treated with consideration and respect, and not as criminals. The result of this is that in most instances the mother is rescued from a life which, if pursued, would surely end in her moral and physical destruction.

After a period varying from six months to two years, the mother leaves the institution, a proper position, in which she can make a living, having been found for her. The child is then placed with some respectable family, adopted by them, and grows up a respectable and valuable member of society. The greatest care is exercised that such foster parents are persons of good character, who will have a real interest and affection for the child.

In connection with the Asylum, the city department of which is at 10th Avenue and 61st St., New York, there are two "country homes," one at Mt. Vernon, West Chester Co., the other at Flushing, L. I.; to these the infants are distributed, and with the most favorable effects on their health.

The only difficulty which the institution encounters in carrying out its plans is in finding a sufficient number of families of the right kind to adopt the children, and this, no doubt, arises from the ignorance that children can be there ob-

tained for that purpose. As the President, Mr. CLARK BELL, justly observes, in a recent address:

I am fully convinced that if public attention was properly called to the number of children for adoption this Institution can furnish, and be made to see how favorable the legal provisions are for protecting the foster-parent in the title custody of the child, we should easily meet the present difficulty, and enlarge very greatly our sphere of usefulness.

We would ask the attention of our readers to this Institution, and advise them to study its details, not only because we believe it to be a model of its kind, but we think they should aid its work, by letting it be known to respectable families among their patients who wish to adopt children, that they can be obtained under the most favorable provisions from this Asylum.

Those who wish for full particulars may address Mrs. Catherine M. Van Auken, 421 Fifth Avenue, New York City, the lady to whose earnest devotion and intelligent care the Asylum owes both its origin and much of its usefulness.

NOTES AND COMMENTS.

Albuminate of Mercury in Syphilis.

Mr. H. W. White, in the Glasgow *Medical Journal*, May, 1882, relates the histories of four cases of syphilis which occurred in the Glasgow Royal Infirmary, and were treated with albuminate of mercury. In all of the cases secondary syphilis was clearly present, and they all improved rapidly and were discharged well, the first case in about forty-five days, the second in less than a month, the third about twenty-five days and the fourth nearly two months. In this last case there was syphilitic iritis and loss of sight, with an eruption of psoriasis on face, neck and back. He was at first treated with the bichloride of mercury and iodide of potassium, but seemed to get worse, when the injections of albuminate of mercury were resorted to, and he immediately commenced to improve, but, unfortunately, was compelled to leave the Infirmary when he had received but seven injections, and before a cure had been effected. In the first case thirteen injections, equivalent to $1\frac{3}{4}$ gr. of the bichloride of mercury, were given, when, owing to commencing soreness of the gums, it was stopped and iodide of potassium with infusion of quassia substituted. The second case received six, one each night, when the iodide was substituted. The third received a total of six injections, each one containing $\frac{1}{6}$ gr. of the bichloride. The solution of the albuminate was injected deeply into the deltoid muscles, and no abscess or suppuration resulted. It was freshly prepared every day, by dissolving 2 grs. of the bichloride of mercury in ʒj of water; to this a solution of one part white of egg to two parts water was added, until all the mercury was precipitated as an albuminate; a saturated solution of common salt was then added, drop by drop, until the precipitate was dissolved, and the solution made up, so that 5 minims contained $\frac{1}{12}$ gr. of the bichloride.

Undescended Testicle.

At a recent meeting of the Medico-Chirurgical Society of Edinburgh (Edinburgh *Medical Journal*) Dr. Heron Watson showed an undeveloped and undescended testicle which he had just removed from a patient over forty years of age.

The man had recently begun to suffer pain on the side on which the testicle had not descended. He also felt as if some body was endeavoring to come down at the time the pain was worst. The nature of the case was evident when an examination was made. He was, therefore, advised to submit to the removal of the atrophied testicle and sac, and so have the abdominal serous continuation into the inguinal canal cut off, thereby preventing hernia, to which he was liable in that condition. The operation had been done antiseptically, and the case had gone on well.

Iron Ring Around External Genitals.

Dr. R. L. Batterbury thus writes in the *British Medical Journal*, April 29th, 1882: On the evening of March 10th I was summoned to see an old man, aged 66, whose penis and scrotum were enormously swollen and œdematous; and on my inquiring the cause, he pointed out to me that he had an iron ring around the root of the penis, behind the scrotum. He was in a good deal of pain, but had no difficulty in micturition, and he had been trying to remove the ring by filing. With the aid of an assistant I succeeded, after an hour's hard work, in filing through the ring and removing it. To accomplish this we held the ring firmly by means of two strong pairs of forceps, and prevented the file from doing injury to the soft parts by inserting a thin iron chisel between the ring and the skin. The ring was a quarter of an inch thick, and an inch and a half in internal diameter. The account the patient gave was that when gardening, on March 4th (six days previ-

ously) he had dug up the ring, and out of curiosity had tried it on. Finding that he could not remove it, owing to the swelling of the parts, he had unwillingly sent to me. The ring had ulcerated through the skin, causing a deep wound, and imbedding itself partly in the soft tissues. Under the use of hot fomentations and lead lotions, the œdema soon disappeared, and the wound healed.

I may add that there were no signs of insanity in the man.

Chionanthus Virginica.

Dr. John A. Henning thus describes this recent addition to the materia medica, in the *Therapeutic Gazette*. It is a small shrub, growing from 5 to 10 feet high. It is found all the way from Pennsylvania to Georgia, growing mostly in sandy and hilly land. The flowers are almost snow white, the leaves are from 4 to 6 inches wide, and from 10 to 12 long. The fruit is berry-like in appearance and contains the seed. It is also known as snow flower, old man's beard and fringe tree. The bark of the root is the part used for medicinal purposes. It possesses tonic, diuretic and diaphoretic prop rties, and is a mild aperient. It might be called an alterative, in the true sense of the term, because it promotes nearly all the secretions, without producing debility. It is an excellent remedy in jaundice, and makes a good tonic in that form of dyspepsia where the mucous membrane of the stomach is in an atonic condition, and the liver and small intestines are torpid. Owing to its tonic power over the stomach and other viscera, it may prove valuable in the atonic stages of scrofula and syphilis. It has been found beneficial in herpes, eczema, psoriasis and roseola, but it must be used for a long time in such cases.

However, after repeated exp rience and close observation with this medicine, I think that in jaundice and hypertrophy of the liver it is reliable in nearly all cases, and doubtless stands at the head of all other remedies for those pathological conditions. Its selecting tendencies are for the liver, kidneys and skin, stimulating those organs to normal action and renewing innervation. To go beyond this, I think we have other remedies that will supercede it.

When we administer any remedy, we must know its action and behavior in the system, and unless we know this, we certainly are practicing more or less empiricism. Now-a days it is very common, especially with new remedies, to overrate them, and to recommend them in certain diseases in which they have no influence. The profession should be more guarded, and in giving any remedy, we must closely observe its action and behavior in the system.

Excretion of Nitrogen by the Skin.

Dr. J. Byrne Power, in the Dublin *Journal of Medical Science*, May, 1882, gives an account of experiments performed on himself and others, to determine the power of the skin to excrete nitrogen. This has been a much mooted question among investigators; some holding the ground that the skin does not excrete nitrogen, while others maintain the opposite view. Indeed, in 1858, Funke, by experiments on himself and two pupils, claimed that he not only found nitrogen in the sweat, but also proved its existence there as urea. Dr. Fleming substantiated these results by experiments. As a result of his experiments, Dr. Power believes that under ordinary circumstances the excretion of nitrogen by the skin is very small indeed, even in cases of gout and Bright's disease, where he expected to find it present in larger amount; and, in conclusion, observes that though he found nitrogen to be excreted by the skin in all cases, yet the quantities were so small that he does not believe the cutaneous excretion can ever act vicariously of the renal to any appreciable extent.

This is a very important question in its relation to the rapidly increasing fatality from Bright's disease, and it is a field into which original investigators ought to turn their efforts.

Pelletierinum Tannicum.

The alkaloid *Pelletierinum*, lately extracted from the *cortex radicis granati*, is, according to Dr. H. Witt (St. Petersburg *Medical Weekly Journal*, April, 1882,) the most certain of all our remedies for tapeworm. In five cases, in which for a number of years all the usual remedies, even extr. felic. marisarth., had proven themselves to be unsuccessful, about twenty-two grains of pelletierinum tannicum followed by a tablespoonful of castor oil had the effect that the dead tapeworm appeared unbroken in the stool. The remedy is easily administered, as it is perfectly tasteless.

Hereditary Lead Poisoning.

The *Medical Times and Gazette* says, that Dr. B. Rennert, of Frankfort, claims to have noticed a peculiar form of hereditary lead poisoning, viz., hydrocephalus, or a disproportionate size of the head, but without signs of rickets or any special tendency to convulsions. His observations were made on eleven families, with seventy-nine

children, among the inhabitants of a village in Hesse, where most of the population are employed in the glazing of pottery, and suffer largely from chronic lead poisoning. Half the children died in the first few years of life, and the survivors suffered as described.

Correspondence.

Corrections.

Ed. Med. and Surg. Reporter:—

I find in the abstract of my paper, Subjective Traumatism of the Eye, read at the last meeting of the Pennsylvania State Medical Society, and reported in your Journal, May 20th a few corrections to make.

The statistics are made up from the Reports of the ophthalmic hospitals and ophthalmic work in general hospitals of the leading cities of the United States, not from the *Dublin* hospitals.

In place of Dr. *Lorenz* read Dr. Loving, and for Dr. *Erbmann* read Erismann.

The emmetropic eye should theoretically be healthy, not *structurally* healthy.

The emmetropic eye should be only liable to objective traumatism, not *subjective* traumatism.

Thanks, for the space already granted, and for these corrections. Wm. T. Little, M.D.

Expert Testimony.

Ed. Med. and Surg. Reporter:—

I read your editorial on "Subpœnas to Medical Men," in the number of the 13th ult. with interest. It is all true as to the right of medical men, when subpœnaed, to testify as to matters of fact. But it is not all the truth when expert testimony is called for; in other words, when an opinion is called for which can be given only by a person who has professional knowledge, obtained by long continued and expensive studies, supplemented with large experience, and upon which knowledge the witness is dependent for his support; if the court cannot get along without such testimony, justice requires that it should be paid for in proportion to the value of the witness' time and professional knowledge when employed privately. If expert testimony is not worth this it is worth nothing. When courts need the assistance of a legal gentleman fifty dollars does not secure very much.

I have known a physician on the witness stand in a New Jersey court, while testifying to facts, refuse to answer a question as to his opinion on a medical point, unless he had a fee. He was not compelled to answer, as he would have been in this State. A person should not be obliged to give expert testimony unless paid a proper professional fee. This entire matter is worthy the attention and action of the State Medical Society.

If experts could be called by courts, instead of the parties to a trial, justice would be promoted and the profession elevated. Whoever can bring about such a procedure in our courts will be a great public benefactor. Justice.

Danville, Pa., May 24th, 1882.

News and Miscellany.

Proceedings of the American Surgical Association.

The Third Annual Session of the American Surgical Association was held at the College of Physicians at Philadelphia, beginning on Wednesday, May 31st, and continuing until Friday, June 2d.

Wednesday, May 31st.

The meeting was opened by the President of the Association, Professor S. D. Gross, M.D., LL.D., D.C.L., with the following remarks:—

Gentlemen of the American Surgical Association, the Executive Committee in charge of this meeting, which I now formally open, has assigned to me the pleasing duty of welcoming you to our city. It would be needless for me to multiply words, but this I may say, that as true and loyal members of our profession we should spare no efforts to pass the time agreeably and profitably.

A union like this may be looked upon both in a practical and in a social aspect. As you will see from the programme placed in your hands by the Executive Committee, the first object has not been overlooked, and that abundance of work has been provided.

Hardly less important are the social features and the cultivation of kindly feelings. If our meetings were only for the discussion of scientific papers and the presentation of cases, they would indeed be cold and tame, if not heartless affairs. There is a wealth of feeling in a savory lunch, a stately pillow, a kind reception, a glass of generous wine. The Executive Committee have laid full stress upon these points. Owing to the amount of work and the limited time, they have made no arrangements for steamboat excursions, drives through our beautiful park or for visits to Cape May or Atlantic City.

The question has been asked, perhaps pertinently enough, what need is there for such an organization as the American Surgical Association? The answer to this question is not difficult, at least, I do not find it so. We have in the United States no fewer than sixty thousand medical men; among these there are a large number of surgeons, whose knowledge and skill would do honor to any country. To unite these men into one harmonious whole, for the benefit of all, is one of the main objects of this Association. Our object is not to interfere with the American Medical Society, but we wish to strengthen that body, to rouse it from its Rip Van Winkle slumbers and infuse into it new life. We cannot injure it. We can only injure ourselves if we fail to do our duty.

We live in a fast age. Progress everywhere stares us in the face. The surgical profession was never so busy as it is at the present moment, never so brilliant, never so full of bold expedients, never so beneficent in its results. Many of our best men are busy in perfecting our knowledge. Theory is giving way to fact. The whole field of surgery, from the structure of a boil on a man's face to an amputation through the hip joint, is undergoing revision. The progress of surgery challenges the respect

and admiration of the world, and although it has not reached its finality, it is as near perfection as we can hope to make it. Surgical pathology was never so sedulously and successfully cultivated. The importance of physiology to the practice of surgery is daily becoming more apparent.

Since our last meeting, death has been busy. Some of our best and most esteemed men have fallen by the wayside. There are seats in this Association which will never again be filled. The list comprises, Wm. Warren Green, of Maine; Hugh W. Brock, of West Virginia; John W. Wood, of New York; John T. Hodgen, of Missouri; and J. C. Huges, of Iowa. To these may be added the name of H. Lenox Hodge, who died early last summer, greatly regretted by all who knew him. The departure from among us of so many prominent men at this early period of our organization, is a calamity, indeed. I should suggest that the Association take proper action in this matter. That this meeting will be conducted with energy, in the best interests of the profession, I feel assured.

The remainder of the morning session was occupied with the reading of the minutes, admission of new members, and the transaction of other business.

AFTERNOON SESSION.

On the reassembling of the Association, Dr. J. L. Cabell, of Virginia, read his paper

On Sanitary Conditions in Relation to the Treatment of Surgical Operations and Injuries.

He said that he would have special reference to external and local conditions, rather than individual peculiarities of temperament. After alluding to many conditions, he referred to the statement of Dr. W. A. Hammond, that he had noticed that wounds heal with greater rapidity when sunlight is allowed to reach them, than when they are covered, but the speaker thought the accuracy of this view might fairly be questioned, in view of the amount of evidence as to the rapidity with which wounds heal under certain antiseptic dressings; but as to the general sanitary value of sunlight there can be no doubt. Purity of the air, water, and food were then noticed.

The plan suggested by Stephen Smith, of New York, by which the primary or anti-pyretic may, by the use of preliminary antiseptic treatment, be extended long enough to give time for the subsidence of shock, while inflammation and traumatic fever are averted, was then alluded to. This primary period may sometimes be extended for a week or longer.

Many statistics were given, to show the influence of septic diseases on the mortality after operations. The Pennsylvania Hospital, in Philadelphia, was given as an illustration of the great triumph of hospital sanitation. From 1875 to 1879, there were performed 108 amputations on 100 persons; of this number 17 died; five deaths took place within 36 hours; four were from tetanus; two from exhaustion, etc.; three from secondary hemorrhage; two from delirium tremens and one from cerebral effusion. During the five years referred to, there was not a single case of pyæmia. This result is attributed to the perfect forced ventilation by the fan, to scrupulous cleanliness, the free use of carbolic acid, and to the system of dressing wounds with flowing water. In the same Institution there were, from 1879 to 1882, four deaths from pyæmia, and one from diffuse cellulitis, out of 28 amputations. The fatal cases were cases of "Railroad crush," which goes far to relieve the hospital from the opprobrium of so large a percentage of deaths from septic diseases.

In the Episcopal Hospital, in this city, there were during the past seven years 80 amputations, with 17 deaths, only one of which was from pyæmia.

In regard to amputations in private practice and Cottage hospitals, the Doctor said the statistics of amputations in private practice and in cottage hospitals, in rural districts, when compared with those of the city hospitals of the usual capacity, due allowance being made for various other influences that determine the results of operations, do not warrant the sweeping conclusion that large hospitals, even those constructed on the block system, with several stories, are *necessarily* liable to outbreaks of septic diseases, or that the mortality must necessarily be greater than in private practice in the same localities, and among the same classes of the population.

The observed sanitary defects of any given hospital will almost certainly be found to be due to faulty location, faulty plan of construction, or to remediable defects of administration. Septic diseases are, indeed, likely to arise in a ward, whether of a large or small hospital, in which a number of surgical cases with open wounds are brought into proximity with each other; but if overcrowding be prevented, it is possible to prevent the spread of these diseases by adequate ventilation and perfect cleanliness in its most comprehensive surgical sense.

In order to prevent the occurrence of septic disease in wards where there are patients with open suppurating wounds, they should be diluted with non-surgical cases. Cleanliness, in its most comprehensive sense, must be enforced; no sponges should be allowed in the wards; no person who has spent some time in the dead house should be permitted to come into a surgical ward, much less assist in any operation, until he has been thoroughly washed and has changed his clothing; patients with fetid ulcerations, especially of a cancerous nature, should be isolated; not more than half of the patients in any ward should have suppurating sores, and under all circumstances, overcrowding must be avoided.

A large part of the paper was devoted to the subject of antiseptics in the treatment of wounds, and especially in ovariotomy. The following were the conclusions which the Doctor presented:—

Septic complications have heretofore been the most fruitful causes of mortality after operations in hospitals, where their malignant effects are observed after secondary, as well as after primary amputations.

Much may be done to prevent the development of septic poison by careful and untiring attention to sanitary precautions, including all the details of personal and hospital hygiene.

After securing all that can be accomplished by patient and scrupulous attention to sanitary arrangements, with a view to render the atmosphere of a hospital comparatively aseptic, there is good reason to believe that an additional protection of great value may be derived from the use of antiseptic precautions practiced in conformity with the Listerian principle.

"Listerism," practiced *de rigueur*, while not so essential in cases of amputation, where it may often be superceded by drainage and perfect cleanliness, has achieved results in operations on joints and in treatment of "abscesses by congestion," which have not been paralleled by any other system of treatment.

The preponderance of evidence is in favor of its utility in ovariotomy and abdominal sections generally, although marvelously good results have been obtained without special antiseptics, by a careful attention to other sanitary arrangements.

DISCUSSION.

Dr. David W. Yandell, of Kentucky, said that since Dr. Keith's report of twenty seven cases operated on without the spray, mentioned in Dr. Cabell's paper, he had added forty more with as good success as when he employed the spray. That although Dr. Keith had abandoned the spray he did not think that he had abandoned Listerism altogether, for while in a large number of cases he used no formal antiseptic, yet he used sponges dipped in hot water, and they were sometimes dipped in a carbolized solution. Dr. Keith considers thorough cleansing and drying of the abdominal cavity, and where this cannot be done, the introduction of a drainage tube, of greater value than Listerism. Mr. Tait uses the same plan.

Mr. Keith, although he had given up the use of Listerism in ovariotomy, still uses it in other operations, as in opening abscesses, removing breasts, etc.

Dr. R. Beverly Cole, of San Francisco, thought that Dr. Cabell's paper was not entirely without prejudice. He quoted Mr. Lister as saying, at the International Congress, "I have never thought, from the beginning, that this system of mine was adapted to ovariotomy, and so impressed was I with this belief that when Dr. Keith informed me of his intention to adopt it and introduce it into his practice, I strongly dissuaded him from it." He thought that the Doctor had regulated his statistics to suit his theory. He did not know that he would be any more free from this than any other man. He said that of the fifteen gentlemen who took part in the discussion of this subject before the International Congress only two came out positively in the support of Listerism. These were Mr. Spencer Wells and Mr. Thornton.

Dr. Letiévant, in a paper read, said. "I am satisfied that this theory of microscopical organisms is not the correct one. He states that when called to examine the ventilation at the Hotel Dieu at Lyons, he found the maternité surrounded by the dissecting rooms, the operating theatre, the chemical theatre and the surgical wards, yet there has never been an epidemic of puerperal fever or other infectious disease incident to the child-bearing patient. He asks, "If there be anything in this theory why have we not had an epidemic of these diseases?"

Dr. H. M. Campbell, Ga., had an experience of forty years' successful practice without the use of carbolic acid. He mentioned the operation of lithotomy as one in which great harm would be caused by closing the wound and treating it according to Lister's plan. "May we not," said he, "be mistaken in thinking that suppuration is caused by microscopic germs?" He thinks that there is a chance for a new explanation. There is nothing more established than the old saying, "Where there is irritation there will be flow"—there is congestion, the result of irritation. He believes that what occurs in suppuration is this: A sensitive part of the body is injured, the delicate sensory nerves are involved. These nerves radiate and transmit influences to the spinal centre, which is in intimate relation with the nerves controlling the blood vessels in the injured part. Thus we have all the apparatus for reflex irritation. We know that suppuration is dependent almost invariably upon the increased amount of blood in the part.

What better means have we of lessening irritation and suppuration, than cold water, a sedative to the part? What better than sedatives and opiates internally?

Dr. J. W. S. Gouly, New York, has always been a consistent anti-Listeric surgeon. In a large hospital practice, for twenty-three years, he has never used the Listeric plan. He had never treated a single wound, after amputation, by closure of the wound and the use of antiseptics. If it be true that the unfavorable symptoms which follow certain operations in conditions of this system are due to the presence of bacteria in the blood and in the wound, the Listeric plan, in his opinion, was the wrong one. It may reach the micrococci in the wound, but how is it to reach those in the blood and lymph? He doubted very much if the spray would prevent their entering the wound if they were in the atmosphere. In reference to this plan of Lister's, he has every proof that it is not Mr. Lister's. He has seen documents going to show that a Frenchman, Dr. DeClat, had, as far back as 1863, proposed the use of antiseptics in the treatment of wounds. He applied carbolic acid, gave it by the stomach, bowels, and by hypodermic injection, with the object of killing bacteria in the blood. This the speaker thought to be a dangerous practice, and of doubtful utility. He had observed several cases of poisoning due to the use of carbolic acid.

While not a Listerist, he was, like every good surgeon, a sound antiseptist. He believed in keeping the parts perfectly clean, in using water and other substances. Alcohol diluted with water has, for twenty years, been a favorite with him. All give quinine. What is quinine but a parasiticide? All use tincture of the chloride of iron and other preparations of iron; these are antiseptics. No good surgeon can be otherwise than an antiseptist. I cannot conceive of any one getting good results from closing wounds after amputation and excisions of tumors. He did not think that Listerism was going to die. It was dead. Few surgeons would long continue to use it.

Dr. R. A. Kinloch, Charlestown, thought that

some of his friends did Mr. Lister and his method much injustice, when they talked about closing wounds, as we know that drainage is a part of the practice insisted on by Mr. Lister. The illustration of his friend in regard to the operation of lithotomy, I consider rather far-fetched. When we come to this matter of carbolic acid, we find that if there be any objection to it, it is to the spray. If carbolic acid does no good, how many are ready to say that it does harm? The mortality has been lessened since the use of Listerism. The very gentleman (Mr. Keith), who excludes the spray from ovariotomy, uses it in other operations. There may not be as much danger from putting the spray into a joint or into the abdominal cavity, but if it does no good, why does he use it? Listerism has accomplished many triumphs. It is not dead. He believed that we should yet hear more of it.

THURSDAY, JUNE 1st. MORNING SESSION.

The discussion of Dr. J. L. Cabell's paper being resumed, Dr. Chas. B. Nancrede, of Philadelphia, said that he thought no one who had faithfully tried this antiseptic system would speak of it as some of the gentlemen had done. He referred to the experience of Nussbaum, who, after having tried every other means of treating wounds, adopted strict Listerian methods. There was an immediate lowering of the mortality. On returning to his old methods, the previous bad results were obtained.

Bardeleben and Billroth have performed some 300 or 400 amputations, without antiseptics. The mortality was about 29 per cent. Taking about the same number of amputations, of equal gravity, performed by Nussbaum, Volkman and others, with the antiseptic system, the mortality was 4.4 per cent.

McCuen, in between 500 and 600 osteotomies had precisely three deaths; one from diphtheria, one from meningitis, and one from some cause which he could not recollect, but it was not from any septic trouble. He had tried the antiseptic method for several years. He stopped using it for several years, but he is now going back to it.

Dr. Geo. W. Gay, of Boston, Mass., had used it more or less during the past five years, in one of the largest hospitals in Boston. He thought there was no way in which a wound could be freed from odor, or profuse suppuration checked so quickly, as by the antiseptic dressing. The advantage of Listerism in ovariotomy has been fully demonstrated. He thought that the present success of operations on the joints was due, principally, to the use of antiseptics.

Dr. R. Beverly Cole, of San Francisco, denied most emphatically, both to Mr. Lister and his method, any credit, in having rendered the opening of joints, and particularly the knee joint, admissible. Dr. E. S. Cooper and himself had practiced free opening of the joints for the past 25 years, in cases of suppurating joints, and also for the removal of floating cartilages. He had no recollection of losing a single case, and yet this was before the Listerian system.

Dr. D. W. Yandell, of Kentucky, had performed ovariotomy twelve times, without the spray, and only one died, but in a number in which he used the spray several died; but he did not say that deaths occurred because he used the spray, any more than that the others recovered because he had not used the spray.

Prof. Moore, of Rochester, N. Y., would go a step further than Dr. Yandell, and say that he thought the reason Dr. Yandell's cases had died, was because he had used the spray. He had shown in an experiment, by allowing the spray to fall on a piece of plate glass, and examining the glass afterwards, that the spray collected a large quantity of motes from the air, and deposited them on the glass. He thought the steam atomizer a most ingenious apparatus for spoiling the peritoneum.

Dr. J. W. S. Gouley, of New York, had within the last ten days opened a perfectly healthy knee joint for the removal of a needle. The patient promptly recovered. He had treated other cases of wounds of the joints, without Listerism, with equal success.

Dr. J. L. Cabell, of Virginia, with a few remarks, then closed the discussion.

Dr. Moses Gunn, of Chicago, Ill., presented the next paper on

The Treatment of Fractures of the Skull, Recent and Chronic, with Depression.

After a thorough study of the subject, he presented the following conclusions:—

1. In all recent fractures with depression, whether simple or compound, even though entirely without symptoms of compression if there is reason to believe that the internal table is depressed, and if there are no symptoms of marked concussion or collapse, elevation of the depression should be promptly effected.

2. In chronic cases, as soon as positive, even though comparatively slight symptoms of cerebral irritation present themselves, a disk of the cranial walls, intended to include the irritating point, should be removed with a trephine of requisite size.

3. All operations and dressings should be conducted on strict antiseptic principles.

DISCUSSION.

Dr. R. J. Levis, Philadelphia, thought that it should be considered an axiom in surgical procedure that the extent of mechanical depression should more influence the surgeon in regard to operative interference, than the symptoms of compression, for the symptoms of shock and concussion may mark the ordinary symptoms of compression. If symptoms of compression are waited for, we shall often leave undone operations that should have been performed early.

Prof. E. M. Moore, Rochester, N. Y., never used the trephine if he could avoid it. He thought that from the tearing of the vessels of the diploë, which it caused, it favored septic poisoning. In dressing wounds of the scalp he utilized the hairs in bringing the edges together.

Dr. Hunter McGuire, of Richmond, Va, thought that the advice given by Dr. Gunn, that every depressed fracture, even if it is simple, should be elevated, is right dangerous doctrine. He thought that to Dr. S. D. Gross, more than to any other man, we are indebted for encouraging operative interference in compound fracture of the skull. To this almost the whole surgical world agrees, but to say that it is proper to operate in every simple depressed fracture, when no

symptoms of compression or irritation are present, is giving to every young surgeon a license to use the trephine, which would be exceedingly dangerous. If the fracture is a simple one, and the depression is not sufficient to cause symptoms of compression, it is better to wait and see if the brain will not be able to accommodate itself to this condition. He had seen a depression of one inch without any symptoms of compression.

Dr. J. W. S. Gouley, New York, described the case of a soldier in which a punctured wound of the skull was produced by the lock of a gun. He was insensible when first seen. Within two hours the trephine was applied and all the fragments were removed. Beneath the disk of bone a clot of blood was found. The depression of bone was very slight. The symptoms were thought to be due to the effusion of blood more than to anything else. In this class of cases, even if the symptoms are not well marked, he thought it wise to operate within the first thirty-six hours. He did not advocate interference in all cases of fracture, but in cases of so called punctured fracture, where there is reason to believe that the internal table is fractured. He had performed the operation a number of times with success.

He described a second case; a miner, who had been struck on the head by an angular piece of coal. He was seen only five or six days after the injury, and complained only of sore head. A small wound was found and an exploratory operation was advised. The scalp was divided by a crucial incision and there was found a slight depression. He trephined this man and removed a number of fragments which had been pressing upon the dura mater. The bone at the seat of the injury was rather white, as though it were dead or going to die. The whiteness extended, and within eight weeks a large amount of dead bone was removed. The death of the bone was thought to be due more to the original injury than to the use of the trephine. He had seen another similar case.

The Doctor described another case of fracture of the skull, two inches above the external angle of the left eye, caused by a brick-bat. The depression was large enough to allow the introduction of the tip of the finger. He did not trephine. This man is in good, general health, but within six months after the injury he was laboring under a mild form of insanity, which is now no worse. The depression still exists.

Dr. H. F. Campbell, Ga., regarded trephining as one of the most capital of all capital operations. He was not willing to admit that because the external plate was depressed, the internal plate must necessarily be broken. As had been said, punctured fractures should be trephined, but he believed that was a part of the old rule, which said "trephine when you see symptoms, but do not trephine when you do not see symptoms, *except* in cases of punctured fractures." He had had bad results from not operating in such cases. He thought the brain could withstand all kinds of aggression but compression. He had been called to see a man with an axe wound in the head, exposing the brain, and found him sitting by the fire, eating his breakfast out of the frying pan. In this case the man recovered without any bad symptoms.

Dr. W. T. Briggs, Nashville, had used the trephine a great many times. He had never regretted using it, but had regretted his failure to use it in some cases. He had frequently seen secondary effects follow untreated fractures of the skull. He did not believe that symptoms of compression arising from pressure upon the brain from depressed bone were sufficient to demand operation, because all know that the brain will accommodate itself to this depressed bone. Pressure from an accumulation of blood was a different matter. He would look for and be guided by the symptoms of irritation of the brain. A boy received an injury of the right parietal bone; there was no apparent depression. He suffered from shock and concussion, which soon passed away. He began to have twitching of the left hand and left side generally. The patient was trephined, although there were no symptoms of fracture until the scalp was incised, when a fissured fracture was found. The symptoms of irritation had been caused by a spicula of bone. The Doctor advised an exploratory incision in doubtful cases. He regarded trephining (including under this term the use of the trephine, elevator, Hey's saw, etc.) as one of the safest of all capital operations.

Trephining is also called for in bruises of the skull, to allow the escape of inflammatory products.

Dr. R. A. Kinloch, of Charlestown, thought an exploratory incision increased the danger, and thought that the presumption that the patient was going to suffer from secondary complications was not strong enough to justify it. Autopsies had often shown that in fracture of the inner table, the edges have been rounded off, and scarcely a remnant of the injury is left. He was a warm advocate of conservative surgery in hese particular cases.

Prof. S. W. Gross, of Philadelphia, said he should have formulated Dr. Gunn's conclusions in the following manner: He should have accepted the second proposition unreservedly. He would modify the first conclusion, to read:—

"In all recent fractures, with depression, if the latter be moderate, whether simple or compound, the patient should be left alone. If, however, fixed and severe pain at the point of injury, febrile excitement, increase of local temperature and a commencing puffiness of the scalp supervene within a few days after the accident—signs which are indicative of depression of the internal table and the development of pachy-meningitis—elevation of the depression should be promptly effected."

In all recent fractures, whether simple or compound, attended with symptoms of compression, the trephine should be resorted to; and the same rule should apply, whether symptoms be present or not, if the depression be considerable and funnel shaped. Punctured fractures should invariably be subjected to operation.

Dr. D. W. Yandell, of Kentucky, would fully agree with the preceding speaker, if he would add in his third proposition "and the symptoms of compression persisting." All know how fleeting these symptoms sometimes are.

Dr. Moses Gunn, of Chicago, Ill., in closing the discussion, remarked, "I have nothing par-

ticular to add to what I have already said. In the outset, I stated that the propositions which I should submit might not meet with general approval. Indeed, I anticipated that they might meet with general condemnation. The discussion has taken a very wide range, but I want to call attention to one or two points. In the first place, I have made no departure from the rule, in the treatment of punctured fractures, nor have I in the treatment of compound fractures, but in the treatment of simple fractures with depression and without symptoms, I have gone a step in advance of the rules laid down by our distinguished presiding officer.

The Treatment of Transverse Fracture of the Patella, with the Object of Producing Bony Union,

was the title of the next paper, prepared by Dr. R. J. Levis, of Philadelphia.

The speaker objected to the use of the ordinary apparatus for the treatment of fracture of the patella, that they presupposed grooves above and below the patella, which did not exist in nature. These grooves could only be made by injudicious pressure. This pressure above the bone would irritate the quadriceps and tend to draw the upper fragment upward, and below the pressure on the ligamentum patellæ would tend to draw the lower fragment downward. The pressure would at the same time tilt the fragments forward. Again, on account of the obliquity of the upper edge of the patella, it is difficult to bring the fragments in contact, for when the fragments are in contact on one side, they may be a third of an inch apart on the other.

One of the most important factors in obtaining osseous union is the restoration of the continuity of the periosteum. The reason fracture occurs most frequently at the lower third, was said to be due to the fact that the tendons of the biceps muscle and the ligaments of the patella terminate at this point, and that there is in this position a leverage over the end of the femur.

In the treatment of this injury, the Doctor advocated the use of Malgaigne's hooks, or rather the modification made by himself, which consists in separating the double hook of Malgaigne's into two.

Had never been obliged to remove the hooks. Never introduced the hooks before the tenth day. The case should be treated with cold lotions and pressure until the inflammation subsides and the time for introducing the hooks arrives. The patient should be kept under treatment for three or four months.

(The doctor then presented for examination two cases of fracture of the patella, which had been treated with his modification of Malgaigne's hooks, in which bony union had apparently occurred).

The discussion of this paper was postponed until the afternoon session. The remainder of the morning session was occupied in the reading of the records of a case by Prof. E. M. Moore, of Rochester, N. Y. The following is a condensed description of the case.

November 12th, 1875, Peter M., a convict in Auburn prison, fell from a wall, causing dislocation of the hip upon the dorsum ilii. It was reduced by manipulation. Three weeks later he fell out of bed and again dislocated the joint. This time it could not be replaced.

December 25th, pulleys, in combination with manipulation, were tried, but failed. The toes were exceedingly everted, the limbs shortened two inches, the head of the femur presenting forward instead of backward, lying just behind the anterior superior spinous process. The limb was peculiarly useless, for in addition to the shortening, the motion of the knee joint was at right angles to the normal line.

December 7th, 1877, two years after the accident, the Doctor attempted an operation for its relief. He desired, if it were possible, to bring the head of the bone into the ischiatic notch by manipulation. This would bring the knee almost to the usual line, and would lessen the shortening. After the lapse of two years he would not, of course, make the attempt to bring the bone into the acetabulum. He hoped to be able to divide the adhesions subcutaneously, by means of a peculiarly shaped knife which he had prepared. The patient was etherized and pulleys applied, but a little examination showed that there was bony anchylosis. A large osteophyte enclosed the head and secured it to the ilium.

He now made an incision below the trochanter, barely large enough to permit the introduction of the finger down to the thigh bone. The bone was cut through about one-fourth of its thickness by a metacarpal saw, both on the anterior and posterior surface. The bone was then fractured, rotated to its proper position, and a weight attached to it. The leg was brought down to within half an inch of its normal length. It was kept in this position one month. At the end of this time his condition was good. The weight was now discontinued and the limb placed on a double inclined plane. During the whole time a drainage tube was kept in the wound. Other openings formed. The treatment consisted of quinine, stimulants, good diet, and the application of poultices. The angle of the splint was daily changed, in order to create a false joint. February 3d, 1878, an apparatus was applied to keep the limb in proper position, and he was allowed to walk on crutches.

The Doctor then lost sight of him until July 22d; his sentence having expired, he was brought to St. Mary's hospital, at Rochester, where he remained until July 30th, when he died, from pulmonary disease. At the autopsy there was found that, although the bone had been separated an inch and a half, the whole space had been filled with osseous deposit. It seemed to the speaker that the growth could have been due only to a rapid and enormous production of granulation tissue, which also, in its turn, furnished an easy opportunity for the deposit of bone salts. It is marvelous that the form and size of the bone should have been so well preserved in this intermediate space.

At one time this patient presented a syphilitic eruption, for which he was given iodide of potassium and some mercury.

The Doctor then presented the specimens from this case, which were examined with great interest.

AFTERNOON SESSION.

The discussion of Dr. R. J. Levis' paper was

opened by Dr. T. G. Morton, of Philadelphia. He first used Malgaigne's hooks in 1873. The result was perfect. He had modified the hooks by separating them into a lower and an upper half, to facilitate their introduction. He saw no use in leaving the hooks longer than sixteen or seventeen days. He never applies them under four days. There are many cases where the hooks should not be used, as, for instance, in comminuted fracture.

(The Doctor here presented a case of comminuted fracture treated by the old method, in which there was wonderful union, the man having as good use of one limb as of the other.)

Where approximation could be made by slight pressure he would not think of using the hooks.

Dr. Wm. A. Byrd, of Illinois, had used, with success, Martin's rubber bandage, first applying a well padded splint to the back of the leg, and then making figure-of-eight turns around the joint and bringing circular turns around the outside of the joint, to counteract any tilting.

Dr. Bontecou had used extension by adhesive plaster, successfully.

Dr. H. F. Campbell, of Georgia, described several cases of the fracture, occurring in his practice, and also a case of congenital abscess of both patellæ, in which the boy had complete use of his limbs.

Dr. R. J. Levis, of Philadelphia, considered it impossible to penetrate the joint with the hooks. There was very little pain attending their use. He employed no particular dressing, but was careful to keep the bed-clothing from displacing them. No other method of treatment will secure such results. He had never had an opportunity of making a post mortem examination of any of these cases.

The discussion of Dr. E. M. Moore's paper was then taken up.

Dr. H. F. Campbell, of Georgia, inquired if the great proliferation of bone might not have been due to some of the peculiar traits of syphilis.

Dr. J. Ewing Mears, of Philadelphia, described a case in which he had performed subcutaneous osteotomy, for the relief of severe pain following an unreduced dislocation of the shoulder joint, and with the hope of establishing a false joint. The pain was relieved, but the autopsy, a year later, showed that osseous union had occurred.

Dr. E. M. Moore, of New York, described another case, in which the attempt to make a false joint at the hip, was followed by bony union. He did not think that syphilis had anything to do with the production of bone in the case he had described.

Dr. J. R. Weist, of Richmond, Ind., then read a paper entitled

Foreign Bodies in the Air Passages.

The paper contained the history of 1000 cases (900 of them never having been before reported) arranged in tabular form. They were collected by personal correspondence with physicians in all countries. From a careful study of these cases Dr. Weist arrived at the following conclusions:—

1. When a foreign body is lodged either in the larynx, trachea or bronchia, the use of emetics, errhines or similar means should not be employed, as they increase the sufferings of the patient, and do not increase his chances of recovery.

2. Inversion of the body and succussion are dangerous, and should not be practiced unless the windpipe has been previously opened.

3. The presence simply of a foreign body in the larynx, trachea or bronchia, does not make bronchotomy necessary.

4. While a foreign body causes no dangerous symptoms, bronchotomy should not be performed.

5. While a foreign body remains fixed in the trachea or bronchia, as a general rule, bronchotomy should not be practiced.

6. When symptoms of suffocation are present, or occur at frequent intervals, bronchotomy should be resorted to without delay.

7. When the foreign body is lodged in the larynx, there being no paroxysms of strangulation, but an increasing difficulty of respiration, from œdema or inflammation, bronchotomy is demanded.

8. When the body is movable in the trachea, and excites frequent attacks of strangulation, bronchotomy should be performed.

DISCUSSION.

Dr. H. F. Campbell, of Ga., Dr. J. Ewing Mears, of Philadelphia, and Dr. Chas. B. Nancrede, of Philadelphia, took part in the discussion, and described additional cases.

Dr. Wm. T. Briggs, of Nashville, Tenn., read a paper on

The Antiseptic Treatment of Wounds after Operations and Injuries.

The speaker made an elaborate analysis of his subject, and embodied the result of his researches in these conclusions:—

1. The germ theory of wound infection is not established.

2. The antiseptic treatment of wounds after operations and injuries is not limited to Listerism or any other special method, but is based upon broad general principles.

3. Antiseptic surgery embraces every condition or agent that tends to prevent putrefactive changes in wounds, or to remove or neutralize the effects of such changes when they have occurred.

4. All wounds are healed by reparative inflammation.

5. All wound-accidents are the result, either directly or indirectly, of destructive inflammation.

6. The antiseptic treatment of wounds, properly considered, consists, first, of such means as will restrain inflammatory action within reparative bonds; and, second, of such means as will subdue excessive action, and remove or neutralize the effects of destructive inflammation.

DISCUSSION.

Dr. E. M. Moore, of New York, fully agreed with Dr. Briggs, and described a plan of operating with exclusion of the air, by allowing carbonic acid to enter the place of operation, when it would, being heavier than the air, preoccupy the space. He had performed ovariotomy four times in this way, but two of the patients had died. He intended to continue his experiments.

The Doctor also referred to the fact that he had, on one occasion, seen a mass of coagulable lymph, as large as a filbert, lying in a wound from which the air had been excluded by allowing the bandages to become soaked with blood.

Dr. H. F. Campbell, of Georgia, spoke of the value of cinchonizing all patients with wounds. He bases its use upon his theory of suppuration. He considers that its value is due to the fact that quinine destroys spinal reflex excitability. He thinks that by quieting the peripheral excitability with carbolic acid and opium, and the centric reflex excitability by quinine, we have the best possible conditions for repair of wounds.

The Association then adjourned.

FRIDAY, JUNE 2—MORNING SESSION.

At the executive session the following resolutions were presented by Dr. D. W. Yandell, and adopted:—

WHEREAS, The American Surgical Association, in annual session at Philadelphia, on June 2d. has learned with deep regret that the Senate Committee on Appropriations has reduced the annual appropriation for the museum and library of the Surgeon General's office, from $10,000, as passed by the House of Representatives, to $5000: therefore,

Resolved, That the President and Secretary are hereby instructed to communicate to the U. S. Senate the views of this Association, as expressed at this meeting, in reference to this proposed reduction, and to state that, in the opinion of this body, such reduction would be extremely unwise, by hampering the growth of the museum and library, in which the people of the whole civilized world are deeply interested, because through these collections and the emanations from them, the knowledge of the science and art of medicine, and its application to the relief and cure of disease and injury, are vastly increased and diffused for the benefit of all mankind, and now to cripple this work, which the Government has in its power to develop, by a reduction of appropriations, would be to retard the unfolding of resources to successfully combat disease and injury, and to impair the growth of an institution which is everywhere regarded as an enduring monument of the philanthropic liberality of the American nation.

Resolved, That these collections, which are unrivaled in their richness and usefulness, are a source of just national pride, and, as they are a benefit beyond price to the whole people, for all men are subject to disease and injury, they are especially worthy of the fostering and liberal care of a government of the people.

Appropriate resolutions in relation to the deaths of Lenox Hodge, J. C. Hughes, W. W. Green, H. H. Brock, J. T. Hodgen, and J. R. Wood, Fellows of the Association, were adopted and ordered to be placed on the minutes.

The officers elected to serve during the ensuing year were: President, Prof. S. D. Gross, M.D., L.L.D., D C.L.; Vice Presidents, Dr. E. M. Moore, Rochester, N. Y.; Prof. Moses Gunn, Chicago, Ill.; Secretary, Dr. J. R. Weist, Richmond, Ind.; Treasurer, Dr. John H. Packard, Philadelphia; Recorder, Dr. J. Ewing Mears, Philadelphia; Council, one year, Dr. R Beverly Cole, San Francisco; two years, Dr. George W. Gay, Boston; three years, Dr. Hunter Maguire, Richmond, Va.; four years, Dr. H. F. Campbell, Georgia.

The first paper read was by Dr. J. C Hutchinson, of Brooklyn, N. Y., on Diseases of the Hip Joint, which elicited some discussion.

Dr. H. F. Campbell, of Ga., then presented a synopsis of a paper on the

Ligation of Arteries for the Cure of Gangrenous Inflammation.

The speaker had tried this method with successful results, and from his experience, he said that no limb which was the seat of traumatic, gangrenous inflammation should be amputated until after ligation of the principal vessel had been tried.

DISCUSSION.

Dr. Bontecou asked if the same results could not be obtained by incisions into the deep fascia? If the pressure can be relieved by slitting open these structures which cause compression, will not the same results be obtained without the risk of secondary hemorrhage?

Dr. H. F. Campbell did not think that this would give relief, for the compression was not from simple swelling of the limb, but every muscle and every fibre of the muscle is distended.

Dr. Bontecou reported a case in which a man was brought into the hospital with his limb covered with blebs. He intended to amputate, but finding that the condition was the result of effusion, he made free incisions, and the man got well.

A paper, entitled

Impacted Intra-capsular Fracture of the Neck of the Femur—Bony Union,

being a description of a case by Dr. Senn, of Milwaukee, was read by the Secretary.

March, 1880. A lady, 75 years old, had fallen on the sidewalk, striking the left hip. On admission to the hospital there was slight swelling about the hip. The left foot was everted; accurate measurement showed shortening of one-third of an inch. On rotation of the limb the arc of the circle described by the trochanter major was greatly diminished. No crepitation could be elicited, nor could the limb be brought to its normal length. The diagnosis was impacted intra-capsular fracture of the neck of the femur, and the patient was placed in the recumbent position, and the limb supported on each side with sand bags. This treatment was continued for nearly three months. She was then placed on crutches. After the third week the shortening gradually increased, until it reached an inch. At the end of a year she could walk well by the use of a cane.

She was again admitted in February, 1882, suffering from catarrhal pneumonia, from which she died.

At the autopsy, the capsule, and especially the upper portion, was thickened and firm, and bridges of connective tissue connected the line of fracture with the anterior portion of the ligament. The line of fracture did not extend beyond the insertion of the capsular ligament. The line of fracture presented a serrated appearance. Longitudinal sections revealed a white

line of dense, compact bone. This was confirmed by the microscope.

The specimen from this case was presented to the Association for examination.

Dr. Moses Gunn, Ill., had examined the specimen, and thought that he traced the line of fracture running up outside of the capsular ligament. He thought that the head of the bone had received its blood supply in this way.

Prof. S. D. Gross had never seen bony union after intra-capsular fracture of the neck of the femur, and never expected to see it.

Dr. Moses Gunn, Dr. H. F. Campbell, Dr. Bontecou, and Dr. W. T. Briggs expressed the same opinion.

Dr. J. Ewing Mears, Phila., presented the results of some experiments he had made in connection with Dr. Morris Longstreth, Pathologist of the Pennsylvania Hospital, on the

Intra-peritoneal Method of Treating the Pedicle by the Ligature, after Ovariotomy.

He first described the various intra and extra-peritoneal methods of treating the pedicle, and then described the first experiment, which consisted in removing both ovaries of a rabbit, and on one side tying the pedicle with catgut, treated by the ordinary process, and on the other with catgut which had been submitted to a solution of chromic acid (1 to 5) for three weeks. Particular stress was laid on the fact that the ligatures were drawn only tight enough to control hemorrhage, and not tight enough to prevent the circulation in the smaller vessels. The rabbit was killed at the end of two weeks, and both ligatures were covered with lymph, a bridge of lymph extending across the groove made by the ligature and uniting the proximal and distal extremities of the pedicle. The raw surface had on one side been covered with lymph, and on the other was adherent to the broad ligament. The distal portion had been nourished in two ways, first by the bridge of lymph and second by interstitial nutrition.

The second experiment consisted in the application on one side of a silk ligature, and on the other of a linen ligature. These had been soaked in a solution of carbolic acid (1 to 20). The animal was killed after four weeks; the ligaments were covered with lymph and were beginning to disintegrate, and between the meshes of the thread wandering cells were found, indicating the manner in which the ligatures disappeared. He thought that two experiments proved nothing, but they might be taken for what they are worth. He and Dr. Longstreth expected to continue the experiments and report at the next meeting.

Dr. Mears presented for examination the specimens showing the results of the experiments.

Dr. Wm. A. Byrd, Ill., had had an opportunity of examining the ligatures after an ovariotomy, and had found them in the condition described by Dr. Mears. He, however, thought better results would be obtained by tension than by leaving a foreign body in the peritoneal cavity.

Dr. Moses Gunn, Ill., thought that if it were proven that nature would cause the absorption of vegetable as well as animal ligatures, it would be something decidedly new.

Dr. J. Ewing Mears had had an opportunity of examining the catgut ligature daily in an ovariotomy in which ligatures were applied, but where the clamp was subsequently required. At the expiration of two weeks the ligature had become a gelatinous soft mass.

After voting resolutions of thanks to the surgeons of Philadelphia, for their hospitality, and to the Commitee of Arrangements, for the efficiency with which they had carried out their work, the Association adjourned, to meet next year in Cincinnati, Ohio.

American Medical Association.

The twenty-third session of the American Medical Association convened at St. Paul, Minnesota, on Tuesday, June 6th, with an attendance of over seven hundred delegates and permanent members from all parts of the country.

After prayer, the Permanent Secretary read protests from most of the societies, against the admission of the delegates of the New York State Society, on account of their action in regard to consultation of regular practitioners with homœopaths. The protests were received by members with loud applause. They were referred to the Judicial Council, for action.

Letters of regret from Dr. S. D. Gross, of Philadelphia, and Dr. J. J. Woodward, U. S. A., of Washington, were read.

Dr. P. O. Hooper, of Little Rock, Ark., was then introduced as acting President, and read the annual address, in which he treated of the progress which had been made within the last year in all branches of science, and particularly in medical science. He also dwelt upon the importance of preventing the introduction into communities of contagious diseases, and stated it as his opinion that vaccination should be compulsory in all the States of the Union. He directed attention to the position taken by the New York State Medical Society, which endangered the very foundation of the Code of Medical Ethics, and stated that, as the matter was referred to the Judicial Council, whose decision would be final, he would refrain from saying further. In conclusion, he paid tribute to the President of last year, Dr. J. T. Hodgen, who died recently, at St. Louis, and to the President, Dr. J. J. Woodward, who is in Europe to regain his health.

It was decided to send a message of greeting to Dr. Woodward, by cable. A list of delegates was then read by the Permanent Secretary, after which the Minnesota State Society, in session at St. Paul, were invited to attend the sessions as members by invitation.

A communication from the Woman's National Christian Temperance Union was then read by Dr. N. S. Davis, of Chicago, in which they advocated introducing the study of physiology, anatomy, hygiene, and especially the results of the use of intoxicating liquor upon the human body, as a part of hygiene, in schools supported by public money. This was referred to the section on State Medicine.

The morning session then adjourned, and the delegates of the different States met separately to elect their member in the Nominating Committee.

The Pennsylvania delegation chose Dr. Fricke, of Philadelphia, as their representative, and instructed him to give his vote for the nomination of Dr. Atlee, of Lancaster, for the Presidency.

In a future issue we will give a detailed account of the proceedings.

The Medical Education of the African Race.

At a meeting of medical teachers and practitioners, called to confer with J. Berrien Lindsley, M.D., LL.D., of Tenn., in regard to the interests of a medical college for colored students, at Nashville, and held at the Hall of the College of Physicians, of Philadelphia, May 8th, 1882, Prof. S. D. Gross was invited to the chair and Dr. J. G. Richardson directed to act as Secretary.

Dr. Lindsley, at the request of the chairman, stated that the Congregational, Baptist, and Methodist churches of the North generously maintained, in the late slave States, about twenty-four institutions of learning for the benefit of the colored people, at an annual expense of nearly $300,000. Among these institutions were three medical colleges, one at Washington, one at Raleigh, and one at Nashville. The last of these, the Meharry medical department of central Tennessee College, had buildings costing $20,000, and was, in his opinion, decidedly the most favorably located.

His object was to gain the endorsement of representative physicians in the North, for the plan of creating a National Board of Trusts, chartered by Congress, for the medical education of colored people, which should be empowered to promote this most desirable object, by aiding the most promising educational establishment of the kind in the South, and further defraying the necessary expenses of those young persons of African descent who should display superior intellectual capacity, in Northern or European schools, as might best serve the great end in view, the elevation of the negro race. It being further designed that special attention should be paid to the complete preparation of colored physicians as missionaries and explorers in Africa.

Dr. H. Hartshorne highly approved of the proposed plan as explained by Dr. Lindsley, and only feared that unless the great advantages of his scheme were very fully understood, it would be difficult to induce all the various denominations interested in this missionary work to thus unite together for its successful prosecution.

Dr. Edward Hartshorne considered Nashville a great intellectual missionary centre, and that if we could establish a good medical school there, the best colored men from the whole Southwest would flock to it, and from these the selected few who developed in advance of their race could be sent, on this well devised plan, to Northern colleges, where the best possible medical training could be secured for them.

Dr. L. D. Harlow remarked that he had been very much interested in this admirable project of Dr. Lindsley's, and was ready to endorse all that he had planned for the elevation of the black people. He sincerely hoped there would be no difficulty in procuring the requisite charter from our national legislature.

Prof. James Tyson observed that his study of the important subject of medical education had rendered him opposed to the erection of any new colleges, but he did not entertain the same objection to fostering an already established Institution. For the last four years colored students had matriculated at the University of Pennsylvania, and one of these graduated the past year with an average as high as that of three-fourths of the class. Another, who will probably graduate next year, has already passed in Chemistry, with the unusual average of 98 in a possible 100. Only one white student is even reported to have left on account of the admission of these colored men, so that the question is practically settled in regard to the University of Pennsylvania, as it is also in the affirmative, in Harvard University.

Dr. J. Cheston Morris believed that, having lived, formerly, on a plantation in one of the Southern States, he was intimately acquainted with the black man's capacities, and he was satisfied that for the next 20, 40, or perhaps 100 years, but a small proportion of the negroes could acquire the preliminary training necessary for a great physician; until that time, he was convinced that the wisest plan would be to maintain a good medical college in the South, at some central point like Nashville.

Dr. J. Solis Cohen called attention to the fact that in seven years the Meharry school had graduated only 23 students, and urged the advantages of combining the three southern colleges into one strong institution, as soon as possible.

The Chairman, Prof. Gross remarked, that if the negro race could develop a great physician in a hundred years, it would prove its vast superiority to the whites, who had required some two thousand years to accomplish the same feat. He believed that the blacks had capacities which in time will develop to a very high degree, but for the present the negro must have his own schools. Applicants had always been refused at the Jefferson Medical College, and it would probably be a long time before they gained admittance, if they ever did so; he, therefore, cordially approved of the plan of Dr. Lindsley.

Dr. Lindsley said he knew, from his own personal observation as former Health Officer of Nashville, that there were in that city hundreds of colored people suffering for want of proper medical care. This state of things, lamentable as it was, existed generally throughout the South, because white physicians could not attend the blacks out of charity, to the extent they used to do, when amply recompensed for their services by the owners of these former slaves. It was to provide qualified medical attendants from their own people, for these suffering human beings, that he invoked the influence of the 70,000 physicians of America, and the substantial aid of the benevolent public at the North.

Dr. J. G. Richardson suggested that the question now before the meeting was not so much how far the black man could be medically educated? but whether this great experiment, which will certainly be tried, shall be attempted under the most favorable circumstances as contemplated by Dr. Lindsley's plan, or whether the pecuniary

advantages which contributions from Northern philanthropists would procure, shall be frittered away in the incomplete support, of six or eight feeble medical colleges? He, therefore, moved that a committee of three be appointed by the chair, to prepare a suitable endorsement of the proposed National Board of Trusts, for the medical education of the colored race.

Dr. Edward Hartshorne moved that the committee be authorized to add to its number, and invested with power to act for the meeting; which resolution and amendment were carried unanimously, and Drs. H. Hartshorne, Richardson and Harlow appointed on the committee.

On motion adjourned.

JOS. G. RICHARDSON, *Secretary.*

The Code of Ethics.

At the late meeting of the Southern Illinois Medical Association, held at Carbondale, Ill., May 17th and 18th, 1882, on motion, a committee was appointed to draft resolutions expressing the sense of the Association in relation to the existing Code of Ethics, which committee presented the following report, which was adopted:—

"The committee to which was referred the preparation of resolutions expressive of the sense of this Association relative to the Code of Ethics, beg leave to report as follows:—

Resolved, That the Southern Illinois Medical Association regard the Code of Ethics of the American Medical Association as eminently just, being founded on truth and sound principles, and that although we wish to be liberal in attaining that end, we should not lower our standard, or trail it in the dust; but firmly defend the right.

Resolved, That a copy of these resolutions be transmitted to the Secretary of the American Medical Association, and that our delegates to that body be instructed to use their votes and influence to retain the existing code."

On motion, the Secretary was instructed to send a copy of the resolutions to a few representative journals, for publication.

H. R. Guthrie, M.D., L. H. Spencer, M.D., S. W. Marshall, M.D., Committee.

JAMES I. HALE, M.D., *Secretary.*

The Gross Professorship of Pathological Anatomy.

A special meeting of the Alumni Association of the Jefferson Medical College was held May 30th, to take action looking toward the endowment of a Professorship in the College in honor of Professor Gross.

Dr. Addinell Hewson was called to the chair and Dr. R. J. Dunglison presented the report of a committee which had been appointed to consider the subject. The Committee recommended the adoption of the following resolutions:—

Resolved, That in appreciation of the great services of Professor Samuel D. Gross to medical teaching in this country, a memorial professorship of Pathological Anatomy be founded by this Association, to be known by his name.

Resolved, That a permanent committee of five be appointed, with power to increase it to a number not exceeding nine.

Resolved, That an Auxiliary Committee be appointed by the Permanent Committee, subject to the approval of the Executive Committee, from the non-resident Alumni.

Resolved, That all vacancies in either committee, shall be filled by the Permanent Committee, subject to the approval of the President.

Resolved, That the Executive Committee shall appoint as trustees of the fund for the professorship, a reliable trust company in the city of Philadelphia.

Resolved, That when, in the opinion of the committee appointed by the Executive Committee of the Alumni Association, the sum be sufficient, a professorship be endowed, on such terms as will best attain the objects proposed by these resolutions, by a sub-committee, of equal numbers of the Executive Committee and the Trustees of Jefferson Medical College.

With the exception of the fifth resolution, which relates to the Trustees, and which was referred to the Executive Committee with power to act, the resolutions were adopted.

The committee also reported that the sum of $2000 was promised by an Alumnus at a late meeting of the Executive Committee, as soon as the fund should reach $8000.

The committees referred to in the resolutions will be appointed by the chairman, hereafter.

The Tenth German Medical Congress

will open in Berlin, June 30th, and close July 2d. The following subjects will mainly be debated: 1. Civic regulations for physicians. 2. Feeding of infants. 3 Necessity of prolonging medical studies to five years. 4. Exhibition for hygiene and of measures etc., in cases of accident. The latter affair will have to be dropped, as the building of the exhibition and a great deal of material which had been stored already in the building were destroyed by fire, May 12th. The loss is said to reach a million dollars.

Dr. Gray.

At a recent meeting of the Medico-Psychological Association of England, the president referred to the attempted assassination of Dr. Gray, of the Utica Asylum, and a resolution of sympathy was unanimously adopted.

QUERIES AND REPLIES.

Subscriber, Mich.—Dr. John J. Reese, Professor of Toxicology in the University of Pennsylvania, says that he has never heard of any toxic effects from oxalate of cerium. Spts. of nitrous ether would, no doubt, in excessive doses, produce much the same poisonous effects as sulphuric ether.

DEATHS.

SEARY.—On May 8th, Charles W. Seary, M.D., in the 39th year of his age.

TROMPETER.—Dr. G. Trompeter, a physician of Port Chester, West Chester Co., N. Y., while hurrying to catch a train at that station, late on Friday afternoon, May 5th, fell dead as he reached the platform. The cause of his death was heart disease. He was 32 years of age, and single. He had resided at Port Chester only 10 months.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1320.] PHILADELPHIA, JUNE 17, 1882. [Vol. XLVI.—No. 24.

Original Department.

Communications.

EPIDEMIC DYSENTERY,

AS IT MANIFESTED ITSELF IN TRENTON AND A PORTION OF GIBSON COUNTY, TENN., IN THE FALL OF 1881. ITS HISTORY AND ETIOLOGY.

BY T. J. HAPPEL, M.D.

Read before the Medical Society of Tennessee, April 10th, 1882.

Gentlemen:—Without any useless waste of words, or consumption of time, in defining dysentery, or entering into any explanation of the terms sporadic and epidemic dysentery, I propose giving you a short history of the epidemic of dysentery which prevailed in Trenton and its vicinity during the fall of 1881.

I desire, in the first place, to call your attention to a few cases occurring in my own practice, and then to others of which I have reliable and trustworthy information.

My first case occurred September 13th, 1881, in the person of a negro woman, advanced to within a few days of the full term of pregnancy.

Occurring thus late in pregnancy, it could readily be accounted for—having been due, no doubt, as the immediate or exciting cause, to imprudence in diet, producing a diarrhœa, which, in the congested and turgid condition of all the pelvic viscera and blood vessels, was easily converted into an inflammatory condition of the lining membrane of the rectum.

The dysenteric discharges continued for three days after delivery, supplanting to a marked extent the lochial discharge.

Treatment by saline purgatives, followed by opiates, in this case availed but little, except to relieve the tormina and tenesmus, both before and after delivery. Finding no cure in such measures, I resorted to the following:—

℞. Pulv. ipecac co., ℥j
Pulv. ipecac, ℈iv. M.
Ft. cht. No. iv.

Sig.—One after each action till relieved.

In forty eight hours the case was virtually cured. The lochia then began to increase, and the patient rapidly convalesced.

My second severe case occurred in our city, in the person of a stout, vigorous, colored, blacksmith. This case we will style No. 1, in a series of fatal cases to follow.

The patient in this case was addicted to what would be called by whisky drinkers the temperate use of whisky, viz: the using as much as from three to ten drinks per day, or as much as one can conveniently take and not be unfitted for work or business thereby. This daily use of stimulants had lasted for years.

So far as I could reliably ascertain, the first dysenteric symptoms manifested themselves Monday, October 3d, a raw, damp, rainy day. Being busy at his shop, in spite of the weather and his disease, he worked at his forge and shoeing horses, stopping about every thirty minutes for his bowels to move, complaining constantly of much abdominal pain. He returned to his forge on the next day, but was advised to go home, keep quiet in bed, take a mild saline cathartic and follow its action with an opiate. Late in the evening he did so, after exposing himself all day, in and out of the shop, alternately heated by the forge and chilled by the cold rain still falling at intervals.

On the 6th inst. I was called to see him, and continued visiting him from that time to the day of his death, October 16th.

In this case every plan of treatment was persevered in until it was found to be of no avail.

About October 11th the actions became serosanguinolent and extremely offensive. Adynamic symptoms were rapidly developed and the patient steadily sank.

In addition to the remedies used in ordinary cases quinine was administered freely, about 30 grs. daily.

The residence of this patient was far better than that of the generality of the colored race, but its location was in the lowest portion of the city, within three-quarters of a mile from the river, on the east, with its malarial surroundings.

Case No. 2 of this fatal series occurred October 12th, in a family south of our city, in which there had been a death from dysentery a week before.

That case was treated, in my absence, by another physician. Reference will be hereafter made to this case.

The patient referred to as Case No. 2 was a bright boy, white, aged about five years. He, with two others, had been attacked, a few days after the death of the case already referred to, with well marked symptoms of acute dysentery, and all had been treated by the father and mother with saline purgatives, followed by laudanum, and, as the family thought, successfully, but after a subsidence of the symptoms in all the cases, the disease returned, with renewed and redoubled vigor, in this one.

I was called to the patient October 15th, the day following this relapse.

There were present the characteristic mucous, bloody discharges, small in quantity, accompanied with pain, etc. In some of the motions mucus predominated, in others blood. Occasionally fecal matter was discharged with the mucus and blood. Tongue heavily coated, dark yellow and dry. Pulse good, 96. Temperature 101°, but reported to have been very high on the night of the 14th, about midnight, before I was called. Much nausea and frequent vomiting.

Administered morphia sulph. to quiet pain and vomiting. Directed hot mustard cataplasms over the abdomen, to be renewed every two hours, and prescribed as follows:—

℞.	Hydrarg. chlor. mit.,	gr. iij
	Santonine,	gr. iv
	Pulv. ipecac co.,	gr. vj. M.
	Div. cht. No. iij.	

Sig.—One every three hours, followed by oil, if needed, to produce fecal discharges; and

℞.	Quiniæ sulph.,	ʒ ss.
	Doses No. x.	

Sig.—One every two hours till six were given, then at intervals of four hours.

And in addition to the above a febrifuge mixture, to be used pro re nata.

At my visit the following morning I found that, with the aid of oil, several large lumbrici had been expelled, and that although some mucus was being passed, it was much reduced in quantity.

Prognosis more hopeful.

Prescribed tr. opii; continued the quinia and febrifuge mixture as before, and directed that in case of a return of the dysenteric actions, a saline purgative be administered, followed by an opiate.

At my third visit, made twenty-four hours later, I learned, from the family, that in a very short time after my previous visit the mucous, bloody evacuations reappeared, becoming shreddy, and with much more pain; and that after administering the saline purgative, as directed, a fecal discharge had been obtained, to be followed, at once, by larger mucous, bloody ones, with increased tormina and tenesmus. I then resorted to larger doses of pulv. ipecac, but to no avail. The pain and suffering of the patient continued to increase, and could be allayed with large doses of morphiæ sulph. only. Early in the morning of October 18th the patient died. No post-mortem.

Case 3 in this series has been already referred to under Case 2, as belonging to my practice, but having in my absence fallen into the hands of another physician, who was, by the family, continued in the case. This case occurred October 7th, and terminated fatally October 10th.

From the family I learn that at the onset of the attack, true, acute, dysenteric symptoms were presented, followed by larger, dark discharges, and collapse; though the death appears on the records as one of cholera infantum.

Cases 2 and 3, as already stated, occurred in the same house, and, had they been sporadic cases, would have been easily accounted for by malarial surroundings as the predisposing cause, and drinking water as the exciting one.

The water used by the family was, mostly, from a cistern that had not been cleaned for several years.

Case 4, of this fatal series, did not occur in my practice, and was in an entirely different portion of our city from Case 2, being on one of its highest points. The patient was a man advanced in years, and, up to a very few years ago, a very

free user of whisky, keeping much under its influence the greater portion of the time, though lately he had not used it so freely.

About three years ago symptoms of cerebral softening appeared, but made slow progress. In this case there had been for some time a torpid, semi-paralyzed condition of the rectum and descending colon..

From the "Records of Births, Deaths and Marriages," I glean the following, in the same series.

Case 5, a white male, aged seven years, occurred inside the city limits, in a portion of our city noted for its healthfulness. The lad was stout and vigorous, rarely ever known to be sick. After an illness of ten days he died, October 22d.

Case 6, an infant, 18 months old, in the neighborhood south of our city—about four miles distant, and about a mile south of Nos. 2 and 3—died September 1st.

Case 7, a white female, aged six years; died September 25th, not far from No. 6.

From reliable sources I collect three more fatal cases, viz:—

Case 8, adult female, the mother of No 7, mentioned above, died October 1st.

Case 9, a colored child in the same neighborhood, and not far distant from No. 6, died October 10th.

Case 10, in a different portion of the district, was a child nearly two years old, in whom the disease became chronic after an acute attack, the death occurring late in November, the child having been sick several weeks.

These ten fatal cases were in district No. 7, in which our city is located.

From Dr. Moore, living northeast of us, in district No. 11, I get information to the following effect:—

He gave prescriptions, at his office, to a considerable number of applicants, presenting dysenteric symptoms, and, excluding these cases of office practice, he visited and treated twenty-six case of dysentery during a space of time dating from September 15th to November 1st, by far the larger number of his cases occurring from October 1st to 20th. Of these twenty-six cases five proved fatal.

Continuing the number of the fatal case series, from Dr. Moore's cases we get—

Case 11, a colored male, adult.

Case 12, an adult female, white, two months advanced in pregnancy.

Case 13, a child, aged 4 months, white.

Case 14, an adult female, white.

Case 15, a child, aged two years, white. These all died between October 1st and 20th. All of these last mentioned fatal cases, except one, were in poor circumstances, and could not and did not have much needed attention and nourishment.

There occurred in Dr. M's practice, among the twenty-six cases spoken of, one in a woman, pregnant eight months, that recovered.

The treatment was varied to suit individual cases. In some particular neighborhoods, in his scope of practice, cases were much more numerous than in others, and more difficult to treat.

From Dr. Bright, in District No. 5, southwest of our city, I learn a state of facts very similar to the above.

Now, having followed the scriptural example, of presenting the bad wine first, I return to a consideration of the disease as it occurred in our city and district, not claiming to take up in the order of occurrence, but according to importance, etc.

One of the first cases in our city was in the person of an adult female, pregnant seven and one-half months. The family was in straitened circumstances, noted for imprudence, and she had the care of an invalid husband in addition to other maternal duties. Under treatment for a few days, she recovered, with no tendency to abort.

Later in the epidemic, I find in the records of my own practice a case of dysentery in a female, pregnant between one and two months. This case recovered without any serious trouble, after several relapses.

In the same family in which Case 10 died, another very serious case occurred, of about nine days' duration.

Almost in the same neighborhood were three other very serious cases; two children between four and seven years of age, and one adult female.

In October, in the practice of Dr. C., was also a severe case in an adult male aged 50 years. Resulted favorably.

From October 1st numerous cases (mild as a rule) occurred simultaneously, in and around Trenton, among parties who had never been in contact with each other. The universal complaint with all who were sick was enteric trouble, and in four-fifths of these cases dysenteric symptoms were reported. The epidemic was at its worst during the twenty days from Oct. 4th to 23d, inclusive.

The "Gibson County A. and M. Association" held its annual meeting from October 11th to 15th, inclusive, and many attended the fair, exposing themselves, in so doing, to the rays of

almost a midsummer's sun. On Thursday, October 13th, nearly 5000 people were present, including 2500 children. On Friday 1500, and on Saturday 2000, or more. These days were exceptionally hot, dry and dusty, and those attending either brought their dinners, or ate barbecued dinners, served on the ground. Many families in our city suffered, and throughout some of the adjoining districts, the week following the fair was one of sickness from dysenteric troubles.

In my own family, one-half, myself in the number, was sick, three out of six, all adults.

The cases were mostly of a mild type, yielding to treatment, so far as the acute symptoms were concerned, in 24 hours, but disorders of digestion continued from one to two weeks, with enteric irritation, in many cases. In a large number of cases the mildest diet and the most easily digested substances were required to prevent a relapse; yet mild relapses were frequent—often relieved by proper and guarded eating.

The different methods of treatment seemed equally successful. A few of the cases, as already stated, were disposed to be chronic, but after from one to two weeks' suffering, with the advent of settled cool weather, slowly recovered.

My estimate of the number affected, including mild cases, is that at least 15 per cent. of the population of our city, and that portion of the district south of us suffered. Dr. Moore does not think the percentage quite so great in his territory, but Dr. Bright makes about the same estimate, so far as his knowledge of the disease extends.

Now, whence came this epidemic? What is, or was, its etiology?

Any one accepting the generally believed doctrine of that Pandora's box of disease causes (and but few deny its all-powerful influence), who will read Dr. Waterfield's description of the sanitary surroundings of the City of Trenton, and its vicinity, as set forth in his report to the "State Board of Health" in 1879, will at once conclude that the chief, if not sole, factor in producing the epidemic was *Malaria*. I seriously doubt the correctness of the assertion made in some of our text books, that the epidemic form of dysentery is due chiefly, if not solely, to malarial influence.

No epidemic of dysentery has occurred here for years.

In 1874 and 1875, when intermittent and remittent fevers prevailed to an alarming extent, so much so that in some neighborhoods in this county there were not enough well persons to nurse the sick, scarcely a case of dysentery occurred.

From that time till now only a few sporadic cases of the disease have each year occurred, while there was during that period of time (six years) a continued decrease of intermittent and remittent fevers, till this year, which has shown a minimum of true malarial fevers.

If malaria had been the chief exciting cause, then we should have had no dysentery this year, while it has been at its maxinum.

Malarial influences alone, then, will not account for the epidemic, as even the chief factor in it, for, as has already been stated, this portion of our county has been, this year, remarkably exempt from the different forms of intermittent and remittent fevers, generally; and, no doubt correctly, attributed to that unknown and undiscoverable something—malaria.

(To be Continued.)

CHOREA.

BY DR. R. B. GLASGOW.

Read before the Northern Medical Association of Philadelphia.

MR. PRESIDENT AND GENTLEMEN—I desire at this time to invite your attention briefly to those incoördinate and involuntary contractions of the voluntary muscles ordinarily described by medical writers under the title of chorea, and which are known by non-medical people as St. Vitus dance, St. Anthony's dance, and the Devil's dance, or the jerks. This last, though it is a very vulgar name, expresses well one of the most prominent symptoms of the disorder.

A host of medical observers have made this disease the object of careful study, and the observations recorded by these gentlemen form a very voluminous literature, to become conversant with which one may refer with profit to the works of Ziemssen, Charcot, Romberg, Rosenthal, Watson, Landon Carter Gray, Weir Mitchell, and to the clinical notes of forty cases of chorea, published in the Philadelphia *Medical Times*, March 27th, 1875, by our friend and neighbor, Dr. Charles K. Mills, to whose honesty and accuracy as an observer I gladly bear witness.

In my studies I have been very much impressed with the diversity of the statements of different individuals who are recognized authorities on the subject, and in my remarks at this time, I will direct your attention mainly to those points on which the authorities differ most widely. Some writers describe the disorder under two forms, viz., chorea major and chorea minor. To me, this appears an unnecessary

labor, the difference between the two being a difference in degree only.

The causes of chorea naturally divide themselves into predisposing and exciting. These I will not attempt to enumerate, lest you tire. In passing, it may, however, be said, that nearly every known abnormal condition, from a sclerosed cerebral cortex to an elongated prepuce, have at various times been considered influential in the causation of the disorder.

We may, I think, regard it a certainty that females are much more liable to the disorder than males. The period of life between the second dentition and puberty, and in this latitude the late winter and spring months, seem especially favorable periods for the development of chorea. The influence of rheumatism and cardiac affections in the production of chorea is a mooted point. Please observe carefully the following reference, which may already be familiar to some of you: "The relations of chorea to rheumatism have been recognized since the beginning of this century. The appearance of cardiac bruits during this disorder was noticed by Addison, and at a later period, by Todd. Romberg and Grisolle considered rheumatism and cardiac affections as mere accidental complications of chorea. But Watson demonstrated, by an analysis of 309 cases observed by Hughes, and 36 cases by Kirkes, that in twelve fatal cases the heart was found diseased ten times, and that among 104 carefully observed cases only fifteen were free from cardiac bruits or rheumatism. Among 128 children affected with chorea, observed by Sée in the Children's Hospital of Paris, there were 64 cases of rheumatism, a fact which is so much the more important because rheumatism, as we all know, is very infrequent among children. Senhouse, Heslop, and Roger have endeavored clinically to establish the relations existing between chorea, rheumatism, pericarditis and endocarditis, holding that both affections are the common expression of one and the same pathological condition. According to observations made at Prague, by Steiner, this pathological relation does not possess an absolute value, since among 254 cases of chorea only four appeared during the course of acute articular rheumatism. It is, therefore, probable that under the influence of local causes the coincidence of the two diseases is observed much more frequently in certain countries, and that certain conditions render the action of the rheumatic inflammation upon the serous membranes, the articulations, the spinal meninges, and the centres of coördination, more frequent and intense. Hughes and Trousseau have observed chorea more frequently after scarlatina; according to Levick, chorea is observed much more frequently among the lower than among the better classes of the population." My own belief is that children of rheumatic or phthisical parents are especially liable to chorea, and I am inclined to believe that any circumstance that impairs the vital powers of the adolescent predisposes to chorea. Fothergill describes the lower classes of the population of large towns as being "ill fed, ill bred, the degenerated products of poverty, lust and syphilis, reared on tea, with a dash of alcohol," a combination of circumstances, I think, eminently fitted to predispose to chorea.

The rôle which anæmia, chlorosis, constipation and intestinal irritation play in exciting an outbreak of chorea, is sufficiently well known to need no discussion here. The symptoms of chorea have no regular course of appearance. Now coming suddenly, following hard on a fright or some shock to the nervous system. At other times coming on gradually, having for prodromata, headache, pain in the cervical and dorsal regions of spine, malaise and changed mental conditions, dullness being probably more frequently observed than otherwise. Not infrequently the patient is scolded for being mischievous, or is thought to be becoming paralyzed. Pain on pressure in the cervical region of the spine is stated, by Bartholow, to be a constant occurrence. This statement I am inclined to disallow. The influence of the patient's will over the movements is variously stated. Cases have come under my notice, in which the more the patient tried to control the movements the more violent they became. The subsidence of the twitching during sleep is recorded by some observers as being constantly noticed. Marshall Hall has, however, observed the persistence of this symptom during sleep in which the patient dreams. One case is recorded in the clinic for nervous diseases at the Hospital of the University of Pennsylvania, in which a relapse of the symptoms came on during sleep in which the patient, who lived near the University, dreamed that she was being "cut up" by medical students.

One case came under my notice, who did not speak a single word for a whole week, presumably on account of the choreic movements of the tongue rendering articulation impossible. The symptoms of chorea, considered in the aggregate, form a picture not easily forgotten. The number of muscles involved and the intensity of the contractions produce great diversity in the symp-

toms, and have doubtless given rise to such terms as hemichorea, local chorea, etc. I have never seen a case of chorea major, described by some writers, but I fancy, from the descriptions given of it, that there may be some likeness, in the movements of one so afflicted, to the movement of a chicken that has had its head suddenly lopped off. The duration o. chorea is variously stated at from three weeks to as many months, and it usually terminates in recovery; the probability of this termination is, however, lessened by cardiac complications; hysteria is a not in requent term : of chorea. Relapses o. the choreic movements not infrequently occur.

The diversities of opinion as to the pathology of chorea are mostly between the older writers and those who have studied the matter more recently, with the aid of the microscope. Still, some modern authorities, among whom may be mentioned DaCosta, hold that chorea is essentially a functional disorder of the nervous system. See fourth edition "DaCosta's Medical Diagnosis.

This agrees well with the statement by Watson, that "the complaint in its genuine form is seldom dependent on any organic or inflammatory change. The instrument, he says, referring to the nervous system, "is not broken anywhere; it is simply slackened, jangling, and out of tune." See "Watson's Practice of Physic." These statements most certainly do apply well to those cases of chorea which recover promptly and perfectly.

Meynert demonstrated microscopical changes of a degenerative nature in the cells of the cerebral cortex.

Broadbent, Tukewell, Hughlings Jackson, and others, have called attention to the presence of minute capillary emboli in the corpus striatum and optic thalamus. My own disposition is to regard chorea as the expression of a group of diverse pathological conditions, for the division of which into separate clinical entities we must wait upon the pathology of the future. The rarity of a fatal termination of a case of chorea has doubtless an unsettling influence upon the views of pathologists in the matter. Rosenthal states that "the chorea which is manifested in articular rheumatism, in inflammation of the pericardium or endocardium, in affections of the female sexual organs, in intestinal irritations, is of reflex origin, and is due to a congenital exaggeration of the excitability of the apparatus of coördination, the latter being disturbed in its functions by the period of puberty, by psychical excitement, and by constitutional debility."

In forming your judgment as to the probabilities of the recovery of a case of chorea, be guided by the following circumstances, viz.: The existence of protracted sleeplessness, cardiac involvement, and pregnancy. The first named of these conditions will wear your patient out; from the cardiac trouble he will probably never recover; and in pregnant women the chorea will not cease, likely, till after delivery. The other cases will probably terminate in recovery spontaneously, or by treatment, as is well described by a prominent authority on the subject, as follows: "The morbid disposition which gives rise to the disorders of coördination may disappear spontaneously, as the organism of the young patient becomes more vigorous, or it may yield to the remedies employed to restore the energy of the nervous system. Sometimes you will find recent cases of chorea arrested by the development of intercurrent diseases, viz., the acute exanthemata." The diagnosis of chorea is said to be usually easy, but there are cases in which I fancy it would not be easy to say where the chorea left off or where the hysteria began. The near relation of chorea to hysteria is pointed out by Rosenthal, Charcot, and by Landon Carter Gray, in the *Archives of Medicine* for October, 1879. Incoördination is the diagnostic symptom of chorea; this symptom is also observed in paralysis agitans, which, however is a disease of patients of more advanced age than is common for choreics. The loss of power in choreic patients may at times puzzle you. A mother brings to you her child, with the statement that the child must be losing the use of its hands; it is constantly letting objects fall. Just ask the child to perform some trifling voluntary act, and the nature of the case will most likely become plain at once. Let us now consider briefly the treatment of chorea. An enumeration of the remedies which at various times have been thought useful in the treatment of chorea, would not only be tedious, but useless. From Guy's Hospital, London, the report comes that by rest in bed in a quiet, darkened room, with proper alimentation, the disease has a spontaneous tendency to recovery in two or three weeks. This treatment, which is probably as rational as any that can be mentioned, is, I should think, especially useful for those cases in which the heart is complicated, but is capable of application in private practice in a limited number of cases only. To prescribe rationally for a disorder the essential nature of which we are in doubt of, is manifestly impossible. That any remedy will be found whose action on chorea will be analogous to the action of

quinia on ague, or of mercury on syphilis, is quite improbable.

The arsenic treatment of chorea has the advantage of being economical and easily administered; very desirable points. Recently, at the clinic for nervous diseases at the University Hospital, the arsenic treatment has been reinforced by the addition of quinia to the treatment, and though the observations in the matter are not sufficiently numerous to warrant a definite statement as to the value of this agent, yet the results appear to warrant an extended trial of the remedy. In treating a case of chorea see that the patient gets light suppers, which may be followed in the evening by morphia and chloral hydrate, if necessary, to secure sleep. The exhibition of spigelia and senna, or the mild chloride of mercury, and santonin in the beginning of the treatment of a class of cases will do no harm, if it does no good. If the patient is a female, in whom the menstrual discharge is not properly established, the use of Mettaur's aperient, a solution of aloes, bicarbonate of soda and valerian, might be indicated.

If it should be desirable to exhibit the arsenic and quinia in combination, it may be accomplished by using the liquor arsenici chlor., acid hydrochloric, quinia sulph., infus. gent. co. syrup, and aqua, in one solution. If the remedies are used separately, Fowler's solution, as much as may be necessary to produce the physiological effects of the drug, and about six grains daily of the quinia, may be used. This is exhibited perhaps least unpleasantly in one dose, at bedtime, in a solution of equal parts of fluid extract of liquorice, simple syrup and water. These should not be mixed till just before they are taken. A maximum amount of sunlight, fresh air, good food, and tepid bathing, followed by frictions of the body with a rough towel, are useful adjuvants to the treatment. The immediate isolation of the choreic patient is a point worthy the notice of medical men who may have charge of institutions in which numbers of female children are grouped.

Hospital Reports.

COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CLINIC OF FRANCIS DELAFIELD, M. D.,

Adjunct Professor of Pathology and Practice of Medicine.

Bright's Disease and Rheumatism.

Gentlemen:—This woman, thirty odd years old, complains of what she calls rheumatism, which has lasted three months, beginning as a pain and stiffness in one of the knee-joints, then extending to the other, and afterward extending still further and involving the joint of the finger, and affecting in some degree the neck and shoulder. It has not, however, become very severe in any of the joints, as she is still able to walk and to use her hands, although there is a certain amount of pain and tenderness.

Then, in addition, we find that she has suffered from dyspeptic symptoms, from occasional nausea and attacks of sick headache. Several years ago she had an attack of jaundice, and we find that three years ago there was œdema of the legs, lasting for several weeks, and at that time her physician said she had kidney disease. Since then she has been passing about two quarts of urine a day, and at present the urine contains a trace of albumen.

Now, it is evident that here we have a case which presents two distinct features, either of which might have occurred without the other, but here they are associated, as they not infrequently are, in the same person. This woman is suffering at the same time from chronic rheumatism and from chronic diffuse nephritis, and from that form of chronic diffuse nephritis, one can be tolerably sure, in which the kidneys become gradually atrophied, the atrophic form of chronic diffuse nephritis. [Patient sent out.]

The prognosis of either of these two conditions is bad enough, and when you have them associated together, of course, the prognosis is still worse, and for that reason I did not care to talk about the case before the patient herself. She is still in fair condition; her complexion is good, she does not look like a sick woman, and yet she has fairly begun with two conditions, each of which is likely to become worse and worse, and in each of which the symptoms will become more and more troublesome; yet we cannot tell how long a course either of these diseases will have. They may last a long while.

In the first place, with regard to the chronic rheumatism, having begun in one joint, and extended, involving others, the probabilities are that it will be a bad form; that which keeps getting worse and worse, involving different joints, and finally crippling the patient.

The form of chronic diffuse nephritis from which she is suffering is that which may go on a long while, developing few symptoms, but which at any time may develop very marked symptoms. The dyspeptic symptoms of which she has complained may at any time become worse, and her general nutrition be affected; she may grow anæmic, and instead of having good color, as at present, may lose the florid hue, and become pale; cerebral symptoms may develop at any time.

Then the question arises, what can we do for this woman? Here we are limited very much by her circumstances. She is evidently a person who has to earn her own living; she will have to remain where she is, and no very thorough treatment can be carried out. If she were a person in good circumstances she could be benefited to a certain extent by travel, by the use of natural mineral waters, especially the sulphur waters. These would be of service both for the kidney trouble and for the chronic rheumatism.

As the case stands, I suppose the best thing we can do for her will be to put her upon the use

of small doses of the bichloride of mercury, letting her take this for a considerable length of time. She should take a thirtieth of a grain of the bichloride of mercury in a bitter infusion, keeping it up for several months. Then, in addition to this, she may with advantage drink some of the alkaline waters, as the artificial Vichy water which is made in this city, a pint to a quart every day; that, I presume, is the best we can do for her under the circumstances, but I expect she will steadily get worse instead of getting better.

Aneurism of the External Iliac.

This man, fifty-two years of age, complains of a pain in the right groin and hip. It has been present more or less during two years past, but it has not been severe enough to keep him from his work until the past two weeks, during which it has been steadily growing worse. When the pain and soreness could be felt he noticed some swelling in the right groin; perhaps, he says, it was there in greater or less degree during the intervals as well, but his attention was not drawn to it except when the above symptoms were present.

On examination we can see at once that there is a lack of symmetry between the two groins; that the right is distinctly larger than the left. When I put my hand upon this tumor I feel a pulsation, and those of you who are near can see my hand moved with the pulsations. It has considerable firmness. It is about four inches in length and two and a half wide. I can get no murmur over it.

The case is evidently one which belongs to the surgical clinic rather than to the medical; a case of aneurism of the external iliac or of the femoral artery, really just about the bifurcation, where the artery passes over the brim of the pelvis. It has already reached considerable size, and the treatment is surgical rather than medical. The tumor, so far, seems to have caused him little inconvenience except pain, but as it has suddenly been becoming larger and larger, the pain has become more severe, and the man was driven to seek relief. He will be made more comfortable while the question is being agitated as to the best surgical treatment, simply by taking the iodide of potash, just as a man would with aneurism of the arch of the aorta. It will diminish the force of the heart's pulsation, it will probably make the tumor a little smaller and the pulsations less vigorous, and the man will be more comfortable.

Phthisis, with Complications.

This young lady was sent here as presenting a case of chlorosis. You observe that she is anæmic, but the anæmia is merely a symptom of the actual disease from which she is suffering. She, I think, has spoken quite right about her condition, that she has consumption. It began probably two years ago, at the time she mentioned. She also says that she is suffering from diarrhœa, which is persistent, and has lasted for a considerable length of time. I presume that this diarrhœa is associated with the condition of the lung, and that it is caused by the existence of ulcers in the small intestine; the kind of ulcers which occur as a regular complication of chronic pulmonary phthisis. We have found that there is dullness on the right side of the chest, and that there are subcrepitant râles in the same region. The amount of trouble which she has with the lung, so far as extent is concerned, is not very great, and yet the girl is run down very much indeed. She is very anæmic, and is made a great deal worse by this complication, chronic diarrhœa. I think it very probable, from her appearance, that she may, by this time, have very well developed a complicating kidney disease—chronic diffuse nephritis.

The best thing she could do would be to go into a hospital. She does not look as if she were well cared for. She wants to be where she can get enough to eat, and I think the immediate indication is, not to treat the local disease, but to treat the general state of the system, which is the result of that disease. I should treat her as if it were a case of chlorosis, simply putting her on the use of iron, combined with the inhalation of oxygen, without paying special attention to the lung trouble; and then in addition to this I should try to treat the chronic diarrhœa; and the first drug which I should use for this purpose would be one of the mineral acids, say the dilute hydrochloric acid, in doses of twenty drops four times a day; and to this I should add a very little opium, say three drops of laudanum with each dose, merely for the sake of checking the diarrhœa. Should she do this I think it very probable she would get a good deal better, perhaps enough better to be able to go on with her work again. That she would get permanently well, is not likely.

Miliary Tuberculosis.

We have here a man, thirty-seven years of age, who says he was well about sixteen months ago; that he was engaged about a slaughter house, at tolerably hard work. He then began to cough, and treated himself with domestic remedies, but the cough got worse instead of better, and it has continued ever since. It is accompanied with muco-purulent expectoration, which is sometimes streaked with a little blood. But he has never raised blood in any amount. The cough is now apparently a very troublesome feature of his case. It keeps him awake at night, and is sometimes so severe as to cause him to vomit his food.

Besides the cough, he has become very short of breath; he is troubled with palpitation of the heart; has lost his appetite; has become very emaciated; very anæmic; his bowels are constipated.

The man's condition at the present time is, as you see, very bad; he is very feeble; very short of breath; he might perhaps better be in bed than be here.

When we come to examine his chest, we find that the heart is increased in size, and that the character of this increase seems to be rather in the way of dilatation than of hypertrophy, but I find no evidence of valvular trouble. We find over the right lung good pulmonary resonance, exaggerated breathing, with prolonged expiration. Over the left lung there is slight dullness, both in front and behind, but this dullness is not at all marked—only moderate. We find that the breathing is not as distinct on the left side as it is on the right, still we can hear it. We find a friction sound over the whole of the left lung.

Now, what is the matter with the man? "Pleurisy with adhesions." Well, he is a pretty sick man for that, is he not? "He has in addition dilatation of the heart." Well, he is pretty sick even for that, for you see the dilatation does not apparently interfere with the circulation to any extent. He has pleurisy with adhesions, undoubtedly, but he would not be in the condition that he is in now if that were all, the other lung being in good condition. "Fibrous phthisis." Yes, he has, I presume, a form of phthisis, very often called fibrous phthisis. The name, however, is a misnomer, to a certain extent. You ought not to mean, when you say that, that the man simply has interstitial pneumonia. There are cases in which persons have developed interstitial pneumonia, and have the symptoms of phthisis, and may properly be said to have fibrous phthisis, but cases like this man's are quite different. He has some interstitial pneumonia, but what constitutes the essential part of his lesion is that there have been miliary tubercles developed through the left lung, and not as an acute process, but as a chronic one. They have not all developed at once, but more and more have been gradually forming, until now the whole of the left lung is probably pretty thickly studded with these hard, chronic miliary tubercles. Then, joined with these there has been a little fibrous phthisis, perhaps not a geat deal, because there is as yet no evidence of any great amount of consolidation of lung. The left lung does not seem to be consolidated to a great extent, although there is a lesion in it.

Then, with the production of these tubercles there has been developed a chronic pleurisy, and this chronic pleurisy has involved the whole surface of the left lung, and it is this which causes the friction sound and in part the dullness. The miliary tubercles do not necessarily give any dullness at all, unless there are a great many of them, or unless there is a good deal of fibrous tissue with them.

That, I presume, is the condition of the man's lung at the present time. He, again, is a patient who by all means should go into a hospital where he could be taken care of. I should treat him also, at first, in very much the same way that I should treat the girl with phthisis, who was in before. The immediate indication is to try to relieve the extreme anæmia, from which the man is suffering; and I should put him at once upon the use of iron and oxygen.

Medical Societies.

CASES OF POISONING FROM DRINKING IMPURE WATER.

BY JAMES H. HUTCHINSON, M.D.,

One of the Attending Physicians of the Pennsylvania Hospital.

Read before the College of Physicians of Philadelphia, May 3d, 1882.

During the past three months I have had under my care at the Pennsylvania Hospital a series of cases which presented a rather unusual set of symptoms, and which possess so much interest that I feel justified in taking up your time this evening with a brief account of them.

The patients were all Germans, and were all employed in a large sugar refinery in this city, at the foot of Bainbridge street, on the Delaware river front, where, however, none of them had worked more than two, or at most three weeks before the occurrence of the attack. The cases so closely resemble one another, that the history of one will suffice for my purpose. I have selected that of the first patient admitted, which was, moreover, much the severest of them all.

R. R., aged 21, born in Germany; single; shoemaker; was admitted into the men's medical ward of the Pennsylvania Hospital on January 30th, 1882. One of his sisters is said to have died of consumption, but with this exception, his family history is good. His own health has always been good until two weeks ago, when, without any apparent cause, he was seized with diarrhœa, attended with a good deal of prostration. He has had as many as ten to fourteen stools a day, and has also had at times nausea and vomiting, but is sure that he has never had fever. Yesterday the diarrhœa ceased, and he has had no passage since. Upon admission the patient is anæmic, and complains of excessive weakness, of vertigo, and of pains in his back and limbs. The tongue is dryish, and coated with a thin, whitish fur; the appetite poor, and the pulse slow; the temperature subnormal, 97°; there is no tympany. The examination of the heart, lungs, and urine gives negative results only; he was ordered a pill containing nitrate of silver gr. $\frac{1}{3}$, and opium gr. $\frac{1}{4}$, three times daily, and placed upon a restricted diet.

Feb. 2d. The patient's bowels have not been moved since his admission; he feels less weak than when admitted; his tongue is also less coated, but his temperature is still subnormal. The use of the pill was discontinued, and he was ordered a teaspoonful of Huxham's tincture, three times daily.

Feb. 20th. The bowels are now moved regularly; he does not appear to gain strength; he was, therefore, ordered cod-liver oil.

March 6th. Discharged cured.

I confess that when this case first came under my care I was puzzled how to explain the symptoms it presented. The presence of excessive prostration, with a history of diarrhœa lasting for two weeks, seemed to point to typhoid fever as their most probable cause. Against this hypothesis was the fact that the patient was positive in his assertions that he had not had fever at any time since he was taken sick, that none was present at the time of his admission or subsequently, and that there was no tympany or rose-colored spots. His condition called, however, for a supporting treatment, and I thought it best to restrict his diet to liquid articles of food.

The other cases came in rapid succession, and presented the same symptoms as the first case. There were in all of them prostration, slow, compressible and often dicrotic pulse, subnormal temperature, diarrhœa, sometimes accompanied by slight pain in the bowels, and absence of tympany. This similarity of symptoms appeared to indicate an identity of cause, and it was soon discovered that in addition to having been employed in the same refinery, they had been all subjected to an influence which seems to me

sufficient to explain the symptoms from which they suffered. It was found upon inquiry that water from the river Delaware is introduced into the refinery for use in cleansing the evaporating pans, and after being used for this purpose, it is returned to the river above the point, although at a considerable distance, from that at which it is taken.* The water is distributed throughout the building, and being more accessible to the workmen than the ordinary hydrant water, is freely used by them for drinking purposes. The water, although said to be filtered before being put to the use first referred to, is probably, from the presence of organic impurities, unfit to drink.

There can be but little doubt that the use of the water of the Delaware river, contaminated as it must be opposite Bainbridge street by sewage, was the cause of the singular symptoms observed in the six patients who came under my care. Impure as it was, it did not, however, produce typhoid fever, and my cases show that while impure water may produce prostration as great as that seen in this disease, it will not produce the fever itself, unless it contains the specific typhoid germs.

The symptoms presented by these cases seem to have indicated the existence of blood poisoning rather than of irritation of the bowels. The latter could hardly have existed without the presence of a certain amount of fever. The temperature records will show that at no time in any one of the cases was there any elevation of temperature above the normal. The stools, too, indicated the existence of relaxation rather than of inflammation; they were rather dark in color and watery, and never presented the ochrey yellow appearance of the stools of typhoid fever. The cases further show that persons may become accustomed to the use of an impure water, or that, at all events, it may cease to excite in them, after a certain time, any active symptoms. It will be remembered that all the patients had only recently been employed in the factory, and the effects of drinking the water had shown themselves very soon after they had entered upon their duties. The older hands drank the water with impunity.

The cases all did well, and required little treatment. Hope's camphor mixture being used in most of the cases to check the diarrhœa, and quinia or Huxham's tincture as a tonic.

It may be well to add that the attention of the proprietors of the refinery has been called to the supposed cause of the illness of their workmen, and they have taken the proper precaution to prevent the occurrence of further sickness among them by cautioning them against the use of this water for drinking purposes.

I have appended to this paper the histories of the remaining five cases which I had the opportunity of observing. They are drawn up from notes taken by Dr. J. M. Fox.

Case 2.—Diarrhœa with typhoid prostration; A. W., æt. 18; born in Germany, single, baker; admitted March 1st, 1882; discharged March 13th, 1882, cured. He came to this country last September; has always been very healthy until two weeks ago, when he began feeling weak and miserable, and to have headaches and diarrhœa, which have continued.

Upon admission has no fever; temperature subnormal; appetite poor; tongue slightly coated; some hebetude and slight headache; no fullness of abdomen; a few râles heard over apex of right lung; examination of heart and urine negative. Ordered quinine, gr. viij daily, and liquid diet.

2d. Tongue clean; only one passage from bowels; pulse slow, with a tendency to reduplication.

3d. Bowels not moved since; no fever; feels much better, but is still rather dull.

13th. Continued to improve, and is now well.

Case 3.—Diarrhœa with typhoid prostration; H. S., aged 28; born in Germany, single, laborer; admitted March 13th, 1882; discharged March 20th, 1882, cured. Has generally been very healthy; eight days ago he began to have diarrhœa, pain in the stomach and limbs, headache, and vomiting, and these symptoms have continued; has had as many as twelve loose stools a day.

He has been working in a sugar refinery, and is the second patient who has been admitted from there into the hospital within the last month and a half, with much the same symptoms, except that the prostration of the other two (R. R. and A. W.) was more marked.

He says that he has been in the habit of drinking the water that is pumped from the Delaware, which is very likely the cause of the trouble.

Upon admission patient feels weak and dull, has headache, vomiting, and diarrhœa; pulse weak and reduplicated (this was also the case with the other two patients); appetite good; tongue clean. Examination of heart, lungs and urine gives negative results. Hope's camphor mixt. f℥ ss. was administered as needed.

15th. Bowels are still loose, and passages are light colored; no more vomiting; diet has been restricted; camphor mixt. was stopped, and powdered opium gr. ¼, with oxide of silver gr. ⅓, were given three times daily.

19th. Diarrhœa has been checked, and he now feels and looks quite well. His temperature since admission, has ranged from 98° to 98½°

Case 4.—Diarrhœa with typhoid prostration; F. S., aged 34; born in Germany, laborer; admitted April 17th, 1882; discharged April 25th, 1882, cured. Has generally been very healthy. Two weeks ago, while working at a sugar refinery, he was taken with a pain in the bowels and diarrhœa, which have continued up to the present time.

Upon admission, patient was somewhat prostrated; has diarrhœa and tenderness in the epigastric region; the tongue is slightly coated in centre, moist; appetite poor; pulse slow; no fever. Heart, lungs, and urine normal. Ordered quinine, gr. viij. daily. Hope's camph. mixt. f℥ ss. as needed, and liquid diet.

April 20 h. Diarrhœa has been checked, and he feels much better.

25th. Feels very well; bowels regular; appetite good. Temperature ranged from 98° to 98½°.

Case 5.—Diarrhœa with typhoid prostration;

* The water is taken from the foot of a long wharf, projecting into the river; it is returned at the point nearest the factory. These two points are distant from each other about 150 feet.

M. Z., æt. 26; born in Germany, laborer; admitted April 17th, 1882; discharged April 25th, 1882, cured. Eight days ago, while working at a sugar refinery, he began to have diarrhœa and pain in the bowels, and these have continued up to the present time.

Upon admission his face is slightly flushed, and he has a typhoid appearance; is somewhat prostrated; tongue coated in centre, moist; pulse slow; bowels were opened six times during the night. He has no fever, and there is no fullness of the abdomen. Examination of heart, lungs and urine gives negative results. Ordered Hope's camphor mixt., f℥ ss, to be given as needed, quinine, gr. viij daily, and liquid diet.

23d. Feels very well: bowels regular; no pain; appetite is good. Temperature has ranged from 98° to 98½°.

Case 6.—Diarrhœa with typhoid prostration; M. W., æt. 19; born in Germany, single, laborer; admitted April 24th, 1882; discharged April 29th, 1882, cured. Has generally been very healthy. Came to this country eight months ago; two weeks ago he began working at a sugar refinery; about a week ago he was taken with diarrhœa, which has since become worse; has not had any nausea or pain.

Upon admission patient is slightly prostrated; face flushed; temperature also subnormal, 98°; tongue slightly furred, moist; pulse slow; appetite poor; bowels loose. Examination of heart, lungs and urine gives negative results. Ordered Hope's camphor mixt. f℥ ss to be given as needed.

29th. Diarrhœa has been checked, appetite has improved, and he seems very well again.

NORTHERN MEDICAL ASSOCIATION.

Remarks on the article presented by Dr. R. B. Glasgow (see page 648).

Dr. L Brewer Hall called attention to forms of clonic spasm, not classified as chorea, occurring as transient complications of many gross nervous lesions. This is instanced in hemiplegia. The study of these conditions may elucidate the pathology of choreic nystagmus, which may not necessarily be dependent upon cerebral lesion, is a functional affection, due, in very young individuals, to impaired vision, which is often the direct result of varied pathological states, like corneal opacity, lack of pigment in choroid, etc., etc.

Dr. G. B. Massey differs with the classification of chorea major and chorea minor. The former occurred in Germany during the middle ages, and is now, as then, an hysterical affection. Psychical impressions, which may variously be made, effect entire relief. The cardiac murmur, so frequently coexistent, is due, in a majority of instances, to anæmia. These murmurs yield to ferruginous preparations, combined with alterative and analeptic therapeusis. The routine arsenical treatment of Fowler's solution is the best, and should be administered in doses, as a rule, much larger than ordinarily exhibited. (Dr. Hall directed attention, incidentally, to the varying strength of different brands of Fowler, and considered this an important fact to be considered when ordering heroic doses.)

Dr. Daniel Longaker, referring to rheumatism as an etiological factor of chorea, does not consider its occurrence in children as rare as authorities would lead us to believe. He has two cases of acute articular rheumatism under observation at present, in children three and four years old.

Regarding the effect of chorea on pregnancy and parturition, Dr. E. W. Holmes narrated an account of a patient who, at the age of 14, first manifested choreic symptoms. They were limited to the hands, and were intensified at the catamenial epochs. When married there was no noticeable increase. During the eighth month of pregnancy she received a severe fright, which precipitated a general and severe form of the disease. Labor occurred at the proper time, and was not in the least complicated or characterized by irregularity. Three weeks subsequent to the accouchement no change in the disease was noticed.

Dr. Henry Beates, has under care a primipara, illegitimately pregnant, who suffered with marked manifestations of chorea, affecting principally the right limb and both arms. The muscles of the trunk occasionally, yet violently, contract. The first symptoms of the disease occurred before pregnancy, and were not aggravated by it. The exhibition of Fowler's solution, in the conventional doses, has effected complete cure. The labor progressed normally, and the patient, now two months later, has no symptoms of the disease.

Dr. Wittig reported an instance of a young girl, aged 15 years, who was subject to chorea. In course of due time the disease was cured by appropriate treatment. Some years later she married, and during pregnancy the disease recurred. At the second month abortion occurred and the disease continued for a considerable time, but eventually yielded to treatment. Reflex irritation such as accompanies entozoa and deranged function, general debility, etc., must invariably be considered in treatment. Regulation of bowels and skin should receive attention and analeptic measures be instituted.

Dr. C. K. Mills agreed with the author of the paper, that the name *chorea* was one applied to various pathological conditions. Extended clinical observation and some patbological experience, led to the belief that chorea was often due to cerebral lesion. It was not uncommon in cases of gross lesion of the cortex to see some choreic manifestations. In unilateral chorea, with hemi-paresis, it was difficult to accept any other view than that of a localized cerebral lesion, as embolism. Chorea associated with anæmia, rheumatism, traumatism and fright would usually be found to be due to cerebral disturbance. Extreme cerebral anæmia resulted sometimes in convulsions; anæmia milder in degree might give rise to choreic twitchings. Rheumatic meningitis sometimes occurs, and the motor cortex is irritated by the inflamed membrane. The etiology of traumatic delirium presents some analogies to that of chorea. An injury to the head resulted in meningitis, and delirium followed, because of cortical irritation. A similar lesion affecting the motor region only might result in chorea. Fright acted by causing cerebral vaso-motor spasm and anæmia.

Dr. Mills related some interesting cases of

local chorea—one which affected the muscles of the ear, another of facial chorea, in which choreic paroxysms occurred at intervals of several days. He referred also to habit chorea, and to hysterical, rythmical chorea, which is apt to be confounded with a form of sclerosis of the cord. The most successful routine treatment for chorea is the arsenical. When arsenic fails, cimicifuga, iron, or mild purgatives may prove efficient. Large doses of bromides may be of temporary service. Quinine is useful where a malarial element exists.

In answer to a question by Dr. C. A. Oliver, with reference to diaphragmatic chorea, Dr. Mills recalled one case, in which irregular diaphragmatic movements had occurred.

Editorial Department.

Periscope.

Inflammation of the Eyes in Newborn Children.

The *Lancet*, May 6th, 1882, says:—

Some years ago the above subject received the attention of the Congress of Instructors of the Blind which met at Dresden. Herr Reinhardt, director of the local blind asylum, on that occasion expressed his opinion that the majority of blind children had lost their sight through inflammation, and attributed its disastrous effects to the prevailing ignorance among the lower orders of the absolute need for skilled medical treatment in such cases. The statistics of twenty-two blind asylums in Germany for ten years (1865 to 1875) show that 40 per cent. of the patients therein received had lost their sight from this cause during their early infancy. In accordance with resolutions adopted recommending the diffusion of sound knowledge upon this important subject, several medical men in Germany have lately given currency, in the press, to their personal experiences. Dr. Colsman, of Barmen, an oculist, recently gave in the *Kölnische Zeitung* some details of interest, and referred to two cases in which each child had lost one eye before medical aid was called in. Dr. Samelsohn, of Cologne, in discussing the various features of this malady, remarks: "Inflammation of the eyes in the case of newborn children does not usually arise, as many consider, from unknown influences of the weather or from exposure to a too powerful light, but rather from the eyes at birth receiving the contact of a contagious substance, the sources of which are abundant among the lower classes of the population, particularly in large cities." According to Dr. Samelsohn's observations, the symptoms of this malady do not appear immediately after birth, but between the third and fifth days of the infant's life. The child, which has hitherto opened its eyes freely, now closes them obstinately against the light, and becomes restless; while a swelling of a more or less important character affects the inflamed eyelids, and from the opening of the lids there flows matter of a yellowish color. If this suppuration cannot be arrested the cornea is often destroyed, and the power of vision irretrieveably lost. With respect to the most effectual remedies, Dr. Colsman remarks that the eyes have been successfully disinfected "By dropping into the eyes, immediately after birth, solutions of two per cent. of carbolic acid or nitrate of silver, and by fomentations of a solution of salicylic acid during the first twenty-four hours, with a view of preventing the outbreak of the disorder."

Intussusception.

Dr. Thomas Cawley Eager records the following unusual case in the *Lancet*, April 15th, 1882:—

At 3.30 A.M., on January 7th, my assistant was sent for to see L. P., aged eight years, the daughter of a ticket collector at Working station. On arriving he found the child in a state of collapse, from which it never rallied, and died at 7.45 A.M. The history of the case was as follows: The child was running about in perfect health at 6 P.M. on the 6th inst., and being sent on an errand by her father was given a sweetmeat, in the form of a mouse, made of white and colored sugar. About an hour and a half afterward she was suddenly seized with intense pain in the abdomen, accompanied by vomiting of partially digested food; and the parents, thinking the attack was simply bilious in character, delayed sending for advice until the time mentioned. Not feeling satisfied as to the cause of death, and as the symptoms presented some of the appearances of irritant poisoning, I considered it advisable to communicate with the coroner, who ordered a post-mortem examination to be made, which took place on the 11th inst. at 12.45 P.M. On opening the thorax the lungs and heart were found to be healthy; but on opening the abdomen a very different state of affairs was disclosed, the intestines being gangrenous. The stomach was removed and opened, but presented nothing abnormal. On tracing the duodenum downward the cause of death was at once apparent; for about four inches from the commencement of the jejunum the gut was found to be intussuscepted for a length of 18 inches, and was gangrenous from that point to within 3 feet of the ileo cæcel valve. The kidneys, liver, etc., were all healthy. The brain was not examined.

Remarks.—Experience teaches one that in intussusception, as a rule, the invagination of the gut is ileo-cæcal; that diarrhœa, with bloody stools, is present; and that generally the patient lives from three to six days. In this case, however, which is unique as far as my experience goes, we find, 1st, a great length of gut invaginated in an unusual position; 2d, a sudden, and not gradual, development of the symptoms; and, 3d, a fatal result happening within twelve hours of the first symptom.

Successful Sponge Grafting.

Dr. Norman Porritt relates the following case in the Edinburgh *Medical Journal*, May, 1882:—

The patient, 14 years of age, employed in a mill as a "firer," was coming down three or four steps, at the bottom of which was a rapidly revolving drum. In doing so he slipped, and fell with his right cheek upon the edge of the drum. The accident occurred on the 7th of November, 1881, and on admission to hospital, immediately after it, I found a pale, somewhat anæmic boy, extending obliquely across whose right cheek was an oval, charred cavity, four inches long and two inches in the greatest breadth, whence the margins converged to a point at each extremity. It had exactly the appearance of a burn, the result, no doubt, of the friction which occurred during its production. Poultices were applied, for which, as the slough began to detach itself, carbolic oil was substituted.

21st November. There is now a rather pale granulating cavity, one-third of an inch deep in the centre, of the shape and size above mentioned. Into this cavity a slice of sponge, prepared according to Dr. Hamilton's directions, was placed so as to fit it accurately and fill it completely, but without rising above the level of the surrounding skin. A piece of dextrin or protective silk was laid over the sponge, and the whole held in position by strips of plaster. Two thicknesses of boracic lint, some wadding, and a bandage, completed the dressing.

22d. The dressings were changed at 11 P.M., as discharge was oozing through them. The sponge is firmly fixed, and covered with odorless purulent fluid, while its edges are yellowish-white.

28th. The dressings are changed, and the wound irrigated daily. The surface of the sponge is black, and on gently pulling the lower part of it the side of the wound is dragged with it. The lower extremity appears incorporated with the granulations visible at the margin. The sponge is soaked in thin purulent discharge.

11th December. There are no indications of granulations pushing through the sponge, which now adheres very firmly. With the scissors a thin slice was taken from the surface, which caused blood to issue from the sponge beneath, and the portion then exposed was of a general faint pink color, no granulations, however, being visible.

21st. The sponge, since the last note, has been dragged more deeply into the wound cavity, and the pink hue is much more pronounced. One small pouting granulation protrudes through the upper portion of the sponge, and the discharge is much more abundant and more creamy.

26th. Many more tufts of granulations now show upon the surface, upon which the sponge tissue is not apparent to the eye, but can be detected by pulling at the surface with the forceps, when fragments of sponge are brought away. The whole has a much more intense red appearance.

9th January. The whole of the sponge structure, with the exception of very small particles, has disappeared, and a mass of healthy-looking granulations at the lower angle of which cicatrization has commenced, occupies the place of the sponge. The mass is the same size as the sponge and projects above the surface of surrounding tissues.

13th. The patient dismissed. The wound is now three-fourths of an inch long and one-fourth of an inch broad, and is healthy and granulating. Cicatrization is proceeding very rapidly indeed.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——We have received the Sixty-fifth Annual Report on the state of the Asylum for the Relief of Persons Deprived of the Use of their Reason.

——We have received the twenty-eighth Registration Report of Rhode Island. It is a most excellently prepared and comprehensive register of all the vital statistics of the State.

BOOK NOTICES.

Materia Medica and Therapeutics. Inorganic Substances. By Charles D. F. Phillips, M.D., Member of the Royal College of Physicians, etc., etc. Edited and adapted to the U. S. Pharmacopœia, by Laurence Johnson, A.M., M.D., Lecturer on Medical Botany, Medical Department of the University of the City of New York, etc. Volume I. pp. 298. New York: William Wood & Co. 1882.

This volume constitutes the April number of Wood's Library of Standard Medical Authors. It discusses the various inorganic materials used in the treatment of disease, and does it well. It will be found a valuable book for all who desire to be well posted in the therapeutics of inorganic drugs.

The Diseases of the Spinal Cord. By Byrom Bramwell, M.D., F.R.C.P. (Edin.), Lecturer on the Principles and Practice of Medicine and on Medical Diagnosis, in the Extra-academical School of Medicine, Edinburgh, etc., etc. pp. 300. Edinburgh: Maclachan and Stewart, 1882.

This is a very valuable book, that deserves to be read by all physicians. The author shows, by this product of his pen, that he has had ample opportunity to observe the subjects upon which he writes, and gives ample evidence that he possessed the ability to profit by this observation. The volume is most profusely and excellently illustrated. The style is clear and intelligible, and it is, taken altogether, a work that can be highly recommended to the profession.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

ENDOWMENT OF RESEARCH.

In an editorial, and a very able one, in a recent number of the *Lancet*, on the new "Association for the Advancement of Medicine by Research," we note the following:—

"We hope that it will confine itself to the encouragement of research, by its official support and its advice, and that no attempt at endowment will be made. Grants by the Royal Society and by the Scientific Committee of the British Medical Association are quite sufficient for this purpose, or, if not, they should be increased. There is no need for another body to take part in this work, and we venture to think that many subscribers whose names appear in the list would withdraw their support if the active endowment of research becomes a feature of the new Society."

These words may convey to the mind of the English reader ideas very different from those that it would tend to generate in the brain of a practical American. Therefore, perhaps, on this ground, we may be hasty in taking exception to them. If so, we apologize in advance. But it would seem that such advice is dangerous, and the very kind that ought *not* to be given to this new Association.

The old saying, that "money makes the mare go," is a vulgar but a very truthful and practical aphorism. Though some pretend that they do not care for money, yet this is, in truth, only a pretence. It is almost as natural for the large majority of men to desire and seek for money, as it is for them to eat. As we understand the meaning of this *endowment*, as referred to by the *Lancet*, it ultimately results in a pecuniary reward to some gentleman who has benefited and advanced his profession by very much hard labor.

In the first place, such a man deserves the reward, and in the second place, the expectancy of remuneration will have considerable influence in bringing many more investigators into the field, than would be found therein were *honor* to be the *only* reward of their labors. It might be objected to our view, that these men who labor for money are not in love with their study, and will, therefore, fail to pursue it earnestly and heartily. Our answer can only be that this is not so. There are many able men in the world who cannot afford to work for nothing, who have no reserve wealth, and must, perforce, make every hour of labor remunerative; while, again, there is a large class who, while they can afford to do so, yet will not labor for honor and fame alone, but must see some likelihood of a substantial remuneration before them.

Of course, there are enthusiasts, who would keep on working in some scientific pursuit with starvation staring them in the face, rather than turn to another occupation less congenial but more remunerative. But such men are very rare. If we desire anything valuable in this world, be it the product of mental or material agencies, we must pay liberally for it. Scientific research is no exception. If we desire deep investigation into the hidden truths of nature we must pay for it.

If it is well for some societies to make grants for certain purposes, we must confess an inability to recognize the logic that makes it wrong for another society (one more directly interested in the matter) to do the same.

If, then, we understand correctly the meaning of "Endowment of Research," we must commend it to all societies. Such a practice cannot become too common; it is impossible.

Notes and Comments.

Cerebral Lesions in Syphilis.

At a recent meeting of the Glasgow Pathological and Clinical Society (*British Medical Journal*), Dr. McCall Anderson showed a man aged 49. Twenty-four years ago the patient had syphilis. About fourteen years ago, after an attack of rheumatic fever, the patient had an attack of paralysis on both sides of the body—less severe, however, on the right than the left. His recovery was speedy, but never complete, slight rigidity remaining on the right side and some numbness on the left. These symptoms were aggravated after a second paralytic seizure, about two years ago, and only began to disappear when the patient was put on anti-syphilitic treatment. At the commencement of the first attack there was temporary unconsciousness. For the last three years there had also been a marked tendency to sweating on the left side of the face Dr. Anderson's diagnosis was a lesion of the motor tract of the brain of the left side, and of the sensory tract of the right side, the degeneration descending to the lateral columns of the cord. The only treatment employed was the inunction of mercurial ointment, which rapidly produced such an amelioration of symptoms that the patient left the hospital.

Transfusion of Saline Solutions in Hemorrhage.

A few years since Goltz put forward the opinion that in cases of grave and repeated hemorrhage death should not so much be attributed to the loss of red globules as to the state of vacuity of the arterial system. Taking up this idea, M. Schwartz, of Halle, in numerous experiments on dogs, remarked that when they were about to succumb to the loss of too large a quantity of blood, the transfusion of a saline solution rapidly augmented blood pressure and revived the animal. Is it not possible that this same process would prove beneficial in analogous cases in the human subject?

A New Vesicant.

Dr. José Armengue, of Barcelona, has lately brought to the notice of the profession a new vesicant, which in many respects would appear to be far superior to cantharides. The new material is derived from the *Œnas afer*, a coleopterous insect, which at certain seasons of the year appears in enormous quantities in many parts of Spain. From experiments which Professor Armengue has instituted, on his own person and on several medical students, he is led to claim for the *Œnas afer*, as a vesicant, the following advantages over cantharides: it is cheaper; it acts without appreciable pain; it is equally powerful; and it does not, so far as his experiments have yet shown, affect the genito-urinary system. If its non-inflammatory action can be established by further experiment, it is probable that the *Œnas afer* will be a valuable addition to the materia medica.

Disintegrated Renal Calculus.

Dr. Ralfe showed a specimen of renal calculus that had been passed in a state of disintegration, to the Pathological Society of London (*British Medical Journal*). It had been lodged in the right kidney for upward of three years, and had latterly caused so much pain that the question of nephrotomy had been discussed. When passed the calculus, which showed signs of erosion on its surface, was reduced to a mere shell. Alkaline treatment had been resorted to with a view of dissolving the stone, but without avail. Recourse was finally had to the plan recommended by Dr. John C. Murray, of Newcastle, of giving the patient considerable quantities (five to six pints daily) of soft water, i. e., filtered rain water. Occasional doses of turpentine and opium were also used, for the relief of colic and hæmaturia. After some months, pieces of grit and scales began to pass with the urine; and finally, at the end of two years the shell of the calculus was expelled.

Cerebro-Spinal Meningitis in a Newborn Infant.

At a recent meeting of the Medical Society of Athens, M. Bambas stated that he was recently called to attend a young woman in the last days of pregnancy who presented all the symptoms of cerebro spinal meningitis; fever, dry and burning skin, great pain over the occiput and in the temples, and vomiting. Notwithstanding appropriate treatment, the patient passed the night in a state of continual agitation, and after 3 A.M. ceased to respond to questions. The symptoms were the same as before, but there was considerable opisthotonos and involuntary passage of urine. At 11 P.M. labor commenced, and she gave birth to what appeared to be a perfectly healthy infant; but her own state continued grave, and she succumbed at 3 A.M.

At five the next morning M. Bambas was called to see the infant, whom he found with burning skin, very rapid pulse, stiffness of the neck and well marked opisthotonos. Death took place a few hours later. M. Bambas concluded that the infant presented a very acute case of cerebro-spinal meningitis.

Cure of Lichen Ruber Without Arsenic.

Up to the present it has been the custom to employ arsenic in the treatment of lichen ruber, and several months were required to obtain a complete cure with this medication.

Unna asserts that he has obtained results much more satisfactory without having recourse to arsenic. The treatment he recommends consists in frictions with the following ointment, over the affected parts:—

℞.	Hydrarg. bichlorid.,	gr. xv
	Ac. carbolic. pur.,	ʒ viss
	Ung. zinci oxid. benzoat.,	ʒ xvj. M.

In grave cases this ointment should be used night and morning, the patient being afterward enveloped in woolen coverings. The condition of the mouth during the period this medication is employed should receive great attention, and gargles should be employed to prevent the development of mercurial stomatitis.

To prevent poisoning by carbolic acid the urine should be frequently examined, and as soon as any trace of phenol appears, large quantities of water should be administered.

Very soon after the first friction the painful itching which prevented the patient from sleeping should almost disappear and become supportable.

Under this treatment, out of six patients, two were cured after eight days; two others in fifteen days; and the two last, who had suffered from the disease more than a year, in three months.

Pulmonary Consumption—Recovery.

Dr. Francis Minott reports seven cases of pulmonary consumption in which recovery took place, in the Boston *Medical and Surgical Journal*, May 4, 1882. The first case was that of a hackman, aged 30. He presented undoubted evidences of phthisis. He was placed on the use of cod-liver oil, with croton oil to the chest externally. Two years subsequently no trace of the disease could be found.

The second was in a lady, aged 35, whose mother had died of consumption. She was given the same treatment and improved rapidly. When examined, four years from her first sickness, the physical signs of phthisis were all wanting, and her strength, color and flesh were perfectly good. She subsequently died, ten years after her first sickness, of consumption, which first made itself manifest only six months before death.

The other cases were treated much in the same way, and the results were equally satisfactory. In one case the influence of hygiene in checking the ravages of consumption was most marked. The patient was a young man of means. His left lung was sufficiently disorganized to allow of a perceptible depression of the chest wall on that side. He was ordered Churchill's hypophosphites, whisky, cold sponge bathing, and iodine to chest. He possessed the means to travel, to ride, and to lead that healthy life so particularly necessary for one whose lungs are weak. He recovered entirely, so that in three years' time he weighed one hundred and fifty-three pounds, and seemed perfectly well. He now imagined that he had heart disease, and became hypochondriacal, and finally died suddenly, while in a railroad train, after complaining a few minutes of faintness. No autopsy was made. These cases teach us that we need not despair when confronted with a case of consumption of the lungs; but they also indicate, that while cod-liver oil and other such tonic and sustaining remedies will do some good, we must look for the greatest benefit from hygienic surroundings. Therefore, unfortunately, is it that pulmonary consumption is a disease so fatal among the poorer classes, while those in affluent circumstances can provide the means wherewith to check its progress.

Treatment of Pertussis.

M. Dujardin-Beaumetz, in his recently published *Leçons de Clinique Thérapeutique*, recommends the bromides with chloral in the treatment of whooping-cough.

He gives, morning and evening, in a glass of milk containing a yolk of one egg, a dessert or tablespoonful (according to the age of the child) of the following mixture:—

℞.	Potass. bromid.,	ʒ ss
	Sodii bromid.,	ʒ j
	Ammonii bromid.,	ʒ ss
	Syrup. chloral. (Fr. cod.),	ʒ iss
	Aquæ,	ʒ ij. M.

The Phosphates in Phthisis.

M. Dujardin-Beaumetz, in his clinical lessons on practical therapeutics, remarks that though the phosphates cannot be considered as specifics in phthisis, still they often prove useful in improving general nutrition.

He recommends the following mixture:—

℞.	Sodii phosphat.,	ʒ iss
	Potass. phosphat.,	ʒ j.
	Syr. aurantii cort.,	ʒ ij
	Vini (claret),	ʒ vij. M.

A wineglassful of this mixture may be taken after each meal.

This preparation gives excellent results, particularly when there is constipation and the quinine preparations are not well supported.

Correspondence.

Government Control of Medical Education.

Ed. Med. and Surg. Reporter:—

I have just read your editorial in the number for April 15th, 1882, p. 411, on "Government Control of Medical Education." This would be entirely contrary to the great characteristic of our American civilization, which is free competition. This free competition is as much needed in medical education as in any other interest. A government control of medical education would be liable to fail to place in the professional chairs those most fit to teach. Our present plan of free competition gives every man a chance to show his capability.

A much better plan, and one which will not do violence to the sentiment of fair play, is a board of examination which shall pay no regard to diploma but shall put every candidate for the practice of medicine to the test of such evidence of attainment as he can exhibit at the time of his examination.

This Examining Board may be entirely independent of compensation derived from the candidates examined, being employed by State authority and paid out of the State Treasury.

This will put no limit upon the number of schools, but will force them to such a standard as will enable their graduates to pass the necessary examination before the State Board of Examiners.

The law requires (in Illinois) all candidates for the practice of medicine who have not diplomas, or whose diplomas are not acceptable to the Board of Health, to come before this Board for an examination.

It is only necessary to abolish this distinction, and require all candidates for practice to come before a board appointed by State authority, to secure a high standard of attainment, while the teaching is left to free competition.

The form of our government, and our traditional regard for State rights, forbid the adoption by Congress of regulations in regard to the practice of medicine in the States, but the contagion of reform will ultimately carry a good system first adopted in one State into all the States.

Jacksonville, Ill. D. Prince, M.D.,

Does Vaccination Protect?

Ed. Med. and Surg. Reporter:—

In answer to Dr. Helm's request, in the Reporter of May 27th, 1882, I would state a personal case which may be of interest to him.

By the family records I was vaccinated successfully when about two years of age, though the evidence of it I could never observe, and again in 1869 I was inoculated with a crust, with evidently no effect.

During the epidemic of smallpox in 1874–5, in Charlestown, Mass., being at that time an assistant of Dr. E. J. Forster, the City Physician—having charge of many of his cases and frequently visiting the *pest* house there, I was, of course, repeatedly exposed to the disease, some of the cases being the most virulent form of smallpox. During this same epidemic I vaccinated several hundred patients, using fresh bovine virus, from which I obtained excellent results. I frequently inoculated myself with the same virus, obtained from different lots, but could obtain no effect whatever. To further test my susceptibility at that time I exposed myself still further by sleeping over night in the same bed and under the same covering with a relative, some three years of age, whose body was well covered with the pustules of advanced smallpox, without the slightest effect upon myself.

During the last epidemic in Chicago, 1882, I have used the vaccine virus from different localities with, generally speaking, good results, in the case of my patients, but with no result whatever upon myself.

In conclusion, to be brief, I believe, as the result of some experience with vaccination and variola, that there may be a time in man's life, of which we know naught, excepting by the test of vaccination, when, if he be exposed to the influence of smallpox virus, he will certainly contract the disease. The bare possibility of such an occurrence is sufficient to warrant us in vaccinating not only seven times, but seven times seven; for the good effects of a successful vaccination I most emphatically affirm.

Evanston, Ill. John H. Burchmore, M.D.

News and Miscellany.

AMERICAN MEDICAL ASSOCIATION

First Day.

The American Medical Association commenced its thirty-third annual session in the Opera House, St. Paul, Minn., June 6th. The Convention having been called to order by Chairman Stone, prayer was offered by Bishop Ireland. Governor Hubbard, of Minnesota, then welcomed the delegates, in an appropriate speech. Ex-Presidents of the American Medical Association, Drs. Sayre, of New York; Davis, of Chicago; Toner, of Washington, and Cole, of California, were invited to take seats upon the platform.

THE ETHICAL QUESTION.

The ethical question then came up, Chairman Stone stating that a number of protests had been received against the admission of delegates from the New York Medical Society, which would be read by the Secretary. Dr. Atkinson then read a number of protests, and referred to others by title, all bearing the same burden and expressing the feeling that the New Yorkers, by their action, had insulted the Association. The letters from Drs. Louis A. Sayre, New York, and Samuel D. Gross, Philadelphia, the latter expressing his regret at not being able to be present, and also referring in terms of censure to the recalcitrants, were received with a furore of applause. Dr. Sayre's letter, which is especially notable as coming from the heart of the disaffected, is as follows:—

THE SAYRE SCREED.

No. 285 Fifth Avenue, May 27th, 1882.

I. Martin Smith, M.D., *Secretary New York State Medical Society*:—

Dear Sir: I have just received from you my

certificate as delegate from the New York State Medical Society to the meeting of the American Medical Association, to be held in St. Paul on the 6th of June. As the State Society has ignored the Code of Ethics by which they were bound as members of the Association, I cannot see how they can expect their delegates to be received by an Association whose laws they refuse to obey and which must, therefore, refuse them admittance.

I therefore respectfully decline to act as its delegate, and hereby return my certificate.

Very respectfully,

LEWIS A. SAYRE, M.D.

These protests, as well as many others, were referred to the Judicial Committee. Vice President Dr. P. O. Hooper (in the absence of the President, Dr. J. J. Woodward, U.S.A.) then read the

OPENING ADDRESS.

He began by paying a high tribute to the absent President, after which he reviewed the history of the American Medical Association from its infancy until the present time, going over the ground thoroughly, and recalling the distinguished names that had been connected with it in the past, as its presidents.

After thanking the citizens of St. Paul for their hospitable reception, the speaker said:—

A generation of mortals have been born, lived and passed away, since the meeting of the convention which recommended the formation of this body. Most of those great spirits who inaugurated this enterprise, and gave form and substance to the ideas there entertained, can mingle with us no more forever. A few, upon whom "age sits with decent grace," still remain, revered for their wisdom and experience; and among these, facile princeps, is he (N. S. Davis) to whom, more than to any other one individual, we are indebted for our permanent foundation, and without mention of whose name there could be no appropriate reference to our beginnings.

In glowing terms he depicted the progressive spirit of our day, and dwelt upon the tendency to reform in medical education, now so happily prevalent in our country. The additions to medical literature in the last ten years, and their great value, was given due consideration. The establishment of a society journal was discussed, and the fact was noted that to this Society is due the credit of having introduced to the people of the different States the import ance of sanitary laws. In reference to the code of ethics, the speaker said:—

"There has recently been exhibited by a few, a disposition to be restive under the operation of certain portions of the code. It may not, perhaps, be becoming in me to discuss this matter here, as it will be for judicial investigation and decision; but I may be permitted to suggest that we should not retreat from our well chosen lines of defence. One mistaken movement would involve us in a whirl of inconsistencies, tending to place us in a false attitude and bring dishonor upon the profession. The broad lines of demarcation between the irregular and the true physician should never be obliterated. Our Association stands prominently forth in its high purposes, and its means of accomplishing these purposes are distinctly enunciated.

In conclusion, the Vice President said: I have attempted, by reference at least, to direct attention, gentlemen, to our present condition, our relation to science, and our duties. If anything I have said may appear presumptuous, you will charitably impute the blame to an earnest desire for the successful accomplishment of the aims of this Association, and a jealous regard for its honor and good name; believing, as I do, that if we go forward in the future as the noble men before us have gone, in the quest of truth, with earnest seeking and unselfish devotion, we will be of good in our day and generation, and fitly perform the work found to our hands to do.

Applause greeted President Hooper as he sat down, and Dr. William Brodie moved that the thanks of the Association be tendered the speaker and his address be published, and the motion prevailed.

Dr. Atkinson then read a letter of regret from the President, Dr. J. J. Woodward, who is in Europe, on account of illness. Dr. Cohen, of Philadelphia, suggested a cablegram be sent to Dr. Woodward, conveying the best wishes and regrets of the Society. This was received with applause.

THE TEMPERANCE CAUSE.

Dr. N. S. Davis, of Chicago, rose and said that he desired to present a preamble and resolution from the Women's National Christian Temperance Union. He was constrained to the presentation by the knowledge that the great woman heart, that pulses so dear to all, beat in unison with the sentiments expressed in the resolutions. They read as follows and were referred to the committee on medical jurisprudence.

THE W. C. T. U. RESOLUTIONS.

WHEREAS, Alcoholic intemperance is a prolific cause of disease. and prevention through the education of the people is one of the most powerful antidotes,

Resolved, That we approve teaching the children and youth in the schools and educational institutions in this country, as facts of hygiene, the physiological dangers and evils resulting from the use of alcoholic beverages, and

WHEREAS, It is the acknowledged duty of the State to provide for such education of the people as is essential to good citizenship,

Resolved, That we recommend the State Legislature to enact laws requiring the physiological dangers and evils resulting from the use of alcoholic beverages to be taught in all schools supported by public money or under State control.

One o'clock having arrived and the preliminary work of opening the Association having been satisfactorily accomplished, an adjournment was agreed upon, without objection.

Each afternoon was occupied with the meetings of the various sections, which we will give in full hereafter. In the evening the delegates were handsomely entertained by Governor Ramsey, Dr. and Mrs. Hand, Dr. Murphy, Dr. A. J. Stone and wife, Mr. and Mrs. A. J. Hill, and Hon. George L. Bicker, as well as at a public reception in the Metropolitan, which was a very elegant social event.

Second Day, Wednesday, June 7th.

The Association was called to order by the acting President at 10 A.M. Prayer was offered by the Rev. D. R. Breed.

This was followed by the Report of the Committee of Arrangements. Letters and telegrams from all over the northwest were read, asking every man, woman and child to visit the various sections. All that was necessary to insure them a royal welcome was to show their registration certificate as a member of the Association. A resolution was received from the City Council of Fargo, extending a most cordial invitation to the Association to visit that city and accept of its hospitality.

The Committee on Nominations was then announced. Dr. J. H. Packard, of Philadelphia, then presented the Report of the Committee on journalizing the Transactions of the Association. This Committee reported that it would cost about $13,000 per annum to establish and conduct a journal, and add that to propose to an Association varying in numbers and membership, from year to year, as the present body has hitherto done. and with an annual income never above $6000, falling sometimes as low as $2500, the assumption of an expense such as that just mentioned would be ridiculous. It is, therefore, recommended by the Committee to adopt the changes in the plan of organization, etc., proposed last year, by virtue of which the membership of the Association would be thrown open to all members of State and county societies, upon application, by the payment of an annual fee of $5, such membership to constitute the holder a subscriber to the journal. There are 90 000 practicing physicians in the United States; it may be supposed that more than one-half. say 50,000, belong to the regular profession: if 3000 would so subscribe the expenses of the journal would be assured. The journal they recommend to be controlled by a board of trustees, who shall appoint the editor, and they advise locating it as centrally as possible. The price to those outside of the Association to be $6. If the trustees can receive pledges of 2000 subscribers, they recommend that the publication be commenced at once.

The report was favorably received and the discussion of it was made the special order for the next morning. After some routine business, Dr. J. A. Octerlony, of Louisville, Ky., was introduced and read an address on

THE PRACTICE OF MEDICINE,

of which the following is but a brief abstract:—

Labor is not in a circle, but progressive, and labor in medical science has progressed rapidly, especially in more recent times. As new ideas have been evolved and new discoveries made, new names have been coined, until medical nomenclature is almost perfect. There has been more progress in this science in the past twenty-five years than in the 2500 years preceding. It must take things as it finds them, and not as it would have them, and deals with facts as they arise. The practice of medicine has undergone a complete revolution—it is not to-day what it was one hundred years ago. In 1827 Bright's disease of the kidneys was not understood, until that gentleman made the disease a special study, and his developments created a new era in medicine.

This illustration is sufficient to indicate the progress of the science in the last century, but it would require volumes to give all the advancement in each specific line. The medical history of the nineteenth century has yet to be written.

The process of crystallization of new knowledge into general law has been slow. The truths discovered have not been always received on first presentation, and the general skepticism of the age has invaded the realm of medicine; but those who have doubted the revelations of medical science have generally been those who were skeptical in regard to most other things which have been well established. Socialists are many, but their faith is very small. The foundations on which we are building were laid by those who preceded us. La Salins, Servetus, Harvey, and Knox form a bright galaxy, whose contributions to medical lore will survive the ages, while many whose names have never been inscribed on the roll of fame have bequeathed to us the best of their knowledge. Were a star to be blotted out now, its light would still reach us through the lapse of years; so when a good man dies, the light from his life is seen for many years after he passes away.

To more fully illustrate the subject Dr. Octerlony mentioned several common diseases in which the practice of medicine has been either modified or revolutionized. He took up the subject of inflammation, which was at first defined as "a morbid state, in which the parts seemed to burn." This term, however, has almost lost its value as a scientific term, being applied to so many things to many of which it has no real application. Afterward it was defined as consisting of four distinct elements, to which in later years was added a fifth, but the whole theory was overthrown when the circulating system was understood.

THE NERVOUS SYSTEM.

The brilliant workers in this field of medicine have not labored in vain, and nervous diseases of all kinds, and in their most intricate forms, are successfully treated. Pulmonary consumption is no longer the dread disease it was once considered.

"The lancet," some one has said, "is a little instrument of mighty mischief." But what the lancet was in former years to medical practitioners, the microscope is now to medical investigators, and its wonderful revelations in the infinitesimal world have kept pace with the revelations of the telescope in the starry world above us. Disease has been analyzed and its causes made known. Leprosy, that fearful scourge of the East in ancient times, has been shown to depend on a vegetable parasite. The microscope has shown that the exciting cause of typhoid fever is also a noxious parasite, and scarlatina and diphtheria fall in line under the same classification, being caused primarily by microscopic fungi. Malarial diseases were long referred to an element so subtile as to elude detection; but the same mighty instrument has shown that these disorders are due to a peculiar parasite, found only in malarial spots and nowhere else. Were the medical world to day to dispense with the

microscope and the vast amount of knowledge obtained through its use, a great part of our knowledge of disease and the proper method of treatment would be taken away from us.

Dr. Octerlony concluded his address by saying that all the important knowledge now in the hands of the profession, and the important discoveries in medical science, had been contributed by the regulars, and not by the irregulars, and expressing the hope that, in the years to come, a Newton in medicine would be found who would do for it what John Newton did for natural science.

At the conclusion of this address a partial report was made by the Judicial Council, through their chairman, N. S. Davis.

JUDICIARY COUNCIL EDICTS.

In regard to the Nebr ska State Medical Society, referred to us last year, the Council report that a careful examination of the documents and matters involved in the protest of certain members of the Nebraska State Association against the admission of said Society to representation in the American Medical Association, shows no proper cause for such protest at the present time, and the Council decide that the Society is entitled to full representation by delegates to this Association.

In regard to the resolution concerning the use of certain remedies controlled by a patent, copyright or trademark, which was reported from the Section on Practice of Medicine and Materia Medica, and by the Association referred to the Judicial Council, last year, the Council has decided that inasmuch as the resolution includes matters not referred to in the Code of Ethics, and said Code contains all that is necessary for the guidance of the medical profession, therefore the resolution should not be adopted by the members of the Association.

NO ADMITTANCE FOR NEW YORK DELEGATES.

In regard to the protest against the receiving of delegates from the New York State Medical Society, which was referred to us, the Judicial Council decide as follows:—

Having carefully examined the Code of Ethics adopted by the New York State Medical Society at its annual meeting in February, 1882, as furnished us by the Secretary of said Society, the Judicial Council find in said Code provisions essentially differing from and in conflict with the Code of Ethics of this Association, and therefore, in accordance with provision of Rule 9 of the By laws of this Association, decide unanimously that the said New York Society is not entitled to delegates in the American Medical Association.

This report was received with long continued applause.

UTERINE TUMORS.

The last paper at the morning session was read by Dr. H. O. Marcy, of Boston, who had for his subject Uterine Tumors. The method by which the lecture was demonstrated, the means used being a solar microscope and stereopticon, excited a large degree of interest, owing to the wonderful clearness and brightness of the subjects cast upon the screen.

After the termination of the lecture, in obedience to the expressed wish of many of the physicians, the inventor, Dr. L. D. McIntosh, of Chicago, explained fully the principles of this solar microscope, an explanation that was listened to with much interest and close attention. This solar microscope may truly be considered as a great aid to scientific investigation. By its aid physiology, pathology, histology can be studied, with illustrations of genuine sections. The circulation of the blood can be mirrored forth with startling distinctness; images of living animalculæ, minute insects and aquatic animals, with all their motions, thoroughly portrayed, and in cases where they are transparent, the beating of the heart and movements of the internal organs are vividly shadowed forth upon the canvass in a degree of perfection almost beyond belief. It is a combined instrument, and can be used as an ordinary monocular solar microscope and as a stereopticon. It is, however, very simple in its arrangement, there being no complicated parts that are liable to get out of order. The stereopticon proper is similar in appearance to the ordinary stereopticon, sunlight, however, being used, instead of artificial light. When the stereopticon objective is removed, and the working part put in place of the stereopticon objective, the solar microscope is then ready for use. If it is wished to be converted into a monocular, the working part is taken off and placed on a stand provided for the purpose. This combination adds much to the value of the invention, and its utility is very largely enhanced. Its use is not confined to physicians and scientists, for it is an instrument that should be in all educational institutions of the higher grades. Its use as a means of instruction is of gr at value, as an object can be shown with equal facility to a large class or audience as to a single person. In the matter of economy, without taking into consideration the superiority of its work, it is in advance of an ordinary stereopticon, as sunlight is cheaper than artificial light. Another feature is that it is exceedingly portable, and can be placed in position in a very short time. The ordinary power is that of 500 diameters, although, with higher objectives, it is capable of attaining a power of 1500 diameters. Taken altogether, it is truly an invaluable invention, and its use will be of an extended nature.

At 1 o'clock the Association adjourned, after passing a unanimous vote of thanks to Dr. Marcy for his entertaining lecture.

Third Day, June 8th.

The Association was called to order at ten o'clock. Prayer was offered by the Rev. M. N. Gilbert.

A number of communications were read, among which was the following from Georgia:—

At the thirty-third annual session of the Medical Association of Georgia, held in Atlanta, April 19th, 20th and 21st, 1882, the following resolutions, offered by Dr. James B. Baird, were adopted:—

Resolved, That the Medical Association of Georgia, in convention assembled, reaffirm its devotion to the time honored "Code of Ethics" of the American Medical Association, which has heretofore been its accepted chart, and shall henceforward be its trusted guide.

Resolved, That this body deprecates any and all attempts on the part of medical organizations to break down this honorable barrier between the regular medical profession and the vast and varied domain of quackery, and do earnestly protest against departures from the true spirit of the supreme law of the organized profession of the Union.

Resolved, That a duly attested copy of these resolutions be presented to the American Medical Association, in open session, at its approaching meeting. The above is a true extract from the minutes. WM. F. HOLT, *President.*

A. SIBLEY CAMPBELL, *Secretary.*

OFFICERS FOR THE ENSUING YEAR.

Dr. J. Foster Pratt, of Michigan, Chairman of the Committee on Nominations, presented the report of that Committee, which is as follows:—

President—Dr. John L. Atlee, Lancaster, Pa.

First Vice President—Dr. Eugene Grissom, North Carolina.

Second Vice President—Dr. A. J. Stone, St. Paul, Minnesota.

Third Vice President—Dr. J. A. Octerlony, Louisville, Kentucky.

Fourth Vice President—Dr. H. S. Orme, California.

Treasurer—Dr. R. J. Dunglison, Pennsylvania.

Librarian—Dr. Wm. Lee, Washington.

Members of Judicial Council—Drs. N. S. Davis, Illinois; J. M. Brown, United States Navy; X. C. Scott, Ohio; M. Sexton, Indiana; N. C Husted, New York; Wm. Lee, Washington, and J. E. Rives, West Virginia.

This report was referred back to the Committee for correction, because it contained the names of absentees.

The Committee also announced that Cleveland had been selected as the place of meeting for next year.

The President announced, at this stage of the proceedings, that the time had arrived for the consideration of the special order, which was Dr. Packard's report in reference to the establishment of a journal of the Association.

Dr. Davis, of Chicago, said that although he was a member of the committee which made its report yesterday, upon reflection he was convinced that some amendments were required, and he therefore offered the following amendments:

Resolved, That the interests of the Association would be promoted by the publication of its transactions in a weekly medical journal under its own control, instead of in an annual volume, as heretofore, provided it could be done without involving pecuniary embarrassment, or so far engrossing its funds as to prevent the annual encouragement of original investigation by its members.

Resolved, That so much of the report of the Committee on Printing the Transactions as relates to the increase of membership of this Association by application from members of State and local societies be and the same is hereby approved.

Resolved, That so much of the report of the Committee on Journalizing the Transactions of the Association as relates to the appointment of a board of trustees, nine in number, and their duties, be and the same is hereby adopted, and that the president of the Association should appoint a special committee of seven to recommend to this meeting of the Association the names of nine members for election, to constitute said board of trustees.

Resolved, That the board of trustees so appointed be requested to agree upon a plan of a medical journal, to be called the *Journal of the American Medical Association*, and to send circulars explaining such plan, and asking pledges of support by actual subscriptions, to the members of the medical profession throughout the whole country, and thereby ascertain as reliably as possible what degree of support the proposed journal can have as a basis for commencing its publication; and that said board also proceed to ascertain and agree upon the best methods of publishing said journal, the best editorial services it can secure to take charge of the work, and the best plan for its issue.

Resolved, That said board of trustees be and are hereby instructed to retain, under all circumstances, in whatever plans or contracts proposed for adoption, entire control over the advertising as well as other pages of the journal that is proposed to be established, and that said board report in full at the next meeting of this Association, the plans upon which it has been able to agree, together with the response of the profession to its circular asking actual subscriptions to the proposed journal, and that the constitutional amendments proposed by Dr. Packard last year be continued upon the table until the report of the board of trustees is received and acted upon.

Resolved, That the Treasurer of this Association is hereby authorized to pay out of funds in the treasury the necessary expenses of the board of trustees in printing and distributing its circulars and in conducting its proper correspondence.

Resolved, That the Committee of Publication proceed to publish the proceedings and transactions of the present meeting in a volume as heretofore, using all diligence to give it an early distribution to those entitled to receive it.

Dr. Davis supported his amendments in an earnest speech, and they were equally as earnestly seconded by Dr. Brodie, of Michigan, and were unanimously adopted.

Subsequently the president appointed the following-named delegates as a committee to appoint the board of trustees, in accordance with the resolutions, viz.: Dr. L. A. Sayre, of New York; Dr. J. M. Toner, of District of Columbia; Dr. J. Foster Pratt, of Michigan; Dr. R. J. Dunglison, of Pennsylvania; Dr. Robert Battev, of Georgia; Dr. W. J. Peck, of Iowa; Dr. H. O. Marcy, of Massachusetts.

Dr. Gihon offered the following resolution, which was unanimously adopted:—

Resolved, That the American Medical Association heartily endorses and commends to Congress the proposition of the Surgeon General of the Navy, to establish at Washington, in connection with the Bureau of Medicine and Surgery of the Navy, and in co-operation with the American Public Health Association and the American Medical Association, a National Museum of Hygiene, which shall exhibit the history and progress of

sanitary science by a collection of publications, articles, models, drawings, etc., illustrating defects and improvements in food, in water supply, bedding, clothing, marine architecture, house and hospital construction, and removal of *excreta* and refuse, culinary, laundry and bath facilities, and for physical culture and exercise, and whatever else tends to the preservation of health and the prevention of disease.

Resolved, That this Association earnestly urges upon Congress the appropriation of the sum of $10,000, which has been recommended for the purchase of exhibits and their consequent care and preservation; and that the Permanent Secretary shall, without delay, send a copy of these resolutions to each member of the Senate and House of Representatives, in Congress assembled.

Dr. Davis offered the following, which was adopted, and the Secretary instructed to forward a copy of the same to each member of Congress:—

To the President and Members of the American Medical Association:—

WHEREAS, There are now employed between sixty and seventy physicians in the United States Indian Service, by authority of the Secretary of the Interior; and

WHEREAS, All physicians appointed to positions in the U. S. Indian Service are required to be graduates of some regular medical college; and

WHEREAS, There are now between 150,000 and 200,000 Indians depending entirely upon these appointed physicians for all medical and surgical treatment; and

WHEREAS, The present humane policy of the government is rapidly advancing the Indian civilization, thereby lessening the dependence in and consequent power of the "Indian Medicine Man," and greatly increasing the demand for and labors of the regularly qualified physician; therefore be it

Resolved, That the Constitution of the American Medical Association be so amended as to provide for the admission to its membership of two delegates from the medical bureau of the United States Indian Service, to be nominated by the surgeon-in chief of the Indian medical bureau and appointed by the Secretary of the Interior.

Resolved, That this resolution shall take immediate effect.

Dr. Toner, of Washington, submitted the report on necrology, which was referred to the Committee on Publication.

METEOROLOGICAL AND CLINICAL RECORDS.

Dr. Davis, from the Committee on "Atmospheric Conditions and their Relations to the Prevalence of Disease," reported that, in accordance with the action of the last annual meeting, stations of observation had been established at Boston, New York, Philadelphia, Baltimore, Charleston, New Orleans, Cincinnati, Pittsburgh, Chicago, St. Paul, Denver, and San Francisco. The committee secured the services of Prof. J. H. Long, to prepare the material and supervise the work for determining the relative proportions of the ozone and other active oxidizing agents in the atmosphere in the several localities. Through the efforts of Prof. Long, a number of eminent professional men of the country were secured to coöperate in the work, in which the United States Signal Service was also induced to coöperate, and to which the committee acknowledges itself under great obligations.

After reciting details of the work accomplished, and its undoubted value to medical science, the report recommends its continuance, and that it may be made still more efficient, that Professor Long be engaged, at a compensation of $500, to personally supervise the laboratory work during the coming year. The actual expenditures of the committee were $209 72, leaving $290.28 of the sum appropriated for the purpose unexpended, which will enable the committee to continue its work another year as prosecuted the past year, but the committee cannot make such other investigations as it seems to it essential should be made.

The report closed with the presentation of two resolutions, one for the continuance of the committee, with the unexpended balance of the appropriation of last year to remain at its disposal, and the other recommending an appropriation of $500 for the employment of Professor Long, as above suggested.

The resolutions were adopted.

Dr. W. A. Byrd, of Quincy, Ill., Chairman of the Section of Surgery and Anatomy, read a paper, which was referred to the Section of Surgery and Anatomy.

Dr. A. L. Gihon read an address on "State Medicine," after which the Association adjourned.

Fourth Day, June 9th.

The Association was called to order at ten o'clock, and prayer was offered by the Rev. E. D. Neill.

A final report was made by the Chairman of the Committee of Arrangements.

The Librarian presented his report, showing that the library contained about 4448 volumes, inclusive of pamphlets.

TREASURER'S REPORT.

Dr. Richard J. Dunglison, of Philadelphia, Pa., the Treasurer, made the following report, which was adopted:—

The Treasurer has the honor to report a balance in the treasury, at this date, of $1141.38. In the statistics furnished by him last year, to the Committee on the President's Address, which was really a report, or journalizing of the Transactions of the Association, the fluctuations of membership were distinctly exhibited. These figures, published in the last volume of *Transactions*, may be considered as still further verified by the experience of the past year. The question to which the Treasurer is compelled to reply more frequently than any other, in the course of a voluminous correspondence with members of the Association, is, "Why do you write to me as a permanent member?" or, "When was I elected a permanent member?" I would, therefore, state, for the information of all those present at the meeting at St. Paul, that every one who attended at that place, as a delegate from a medical society, will thenceforth become, from the very fact of such at-

tendance, a permanent member of the American Medical Association, who should annually pay five dollars to the Treasurer, as his dues to that body, according to the rules of that Association, expressly stated and printed in each annual volume of *Transactions*. As copies of the annual Transactions for previous years may still be obtained, it is suggested that those who have neglected to pay their dues at any time previous to the present year will communicate with the Treasurer, who will cheerfully respond to all inquiries, and inform them as to the volumes which are still in print and procurable from him.

EXPERT TESTIMONY.

Dr. Gihon called up his resolution on expert testimony, which had been laid on the table on Thursday, and offered the following as a substitute, which he said obviated the objections made to the original resolution:—

Resolved, That it is the sense of the American Medical Association, that it will be conducive to justice and the dignity of the profession, if medical expert testimony can be presented to the courts without having the appearance of being biased by any intention to influence either side of a case, but simply to state scientific facts.

The resolution, after a little running debate, was unanimously adopted.

SALARY OF THE SECRETARY.

The salary of the Permanent Secretary, aside from his expenses, was fixed at $1000 per annum, after some discussion, and Dr. Toner, of Washington, gave notice that at the next annual meeting he would offer an amendment to the by-laws, so that a secretary could be elected who would serve without pay.

Dr. Keller, of Arkansas, moved that the secretaries of the State Societies send annually to the Secretary of the American Medical Association a list of the members dropped from the State Societies. Adopted.

EVERY OTHER MEETING TO BE HELD IN WASHINGTON.

Dr. N. S. Davis introduced the following:—

Resolved, That after the next annual meeting the permanent interests and influence of this Association would be best promoted by again holding every second meeting in Washington, as its home on common national ground, and not as invited guests, while each alternate meeting should be held in such section of the Union as would be most useful in promoting the society organizations in all parts of our country. Adopted.

The following trustees, to found and conduct the journal, were announced:—

For Three Years—Drs. Davis, Chicago; Moore, New York, and Toner, Washington.

For Two Years—Drs. Campbell, Georgia; Packard, Pennsylvania, and Connor, Michigan.

For One Year—Drs. Hooper, Arkansas; Garcelon, Maine, and McMintry, Kentucky.

Dr. Brodie, of Kentucky, then offered a series of resolutions, expressing gratitude to the citizens of St. Paul for their hospitality. The resolutions were seconded by Dr. N. S. Davis, of Chicago.

The session then listened to an interesting address from Dr. D. H. Goodwillie, of New York, Chairman of the Section on Dentistry, on that important subject.

He spoke respecting the divisions of the Section, which naturally separates itself into a number of branches. These divisions are dental art and oral surgery. The first is nearly all mechanical in its nature. The second includes the treatment of all diseases of the mouth. To the proper practice of the latter it is necessary that there be added the experience of the former, with a practical knowledge of medicine and surgery. Such knowledge should be supplied from the chairs established in all our medical colleges, the practical department to be supplied by infirmaries and hospitals to give this knowledge. He illustrated the many diseases of the mouth and associate parts by cases in his own experience, exhibiting diagrams, photographs, instruments, and over twenty wax models of notable cases. Among them were inter-nasal and inter-oral extirpation of the bones of the nose and jaws, with a reproduction of bone without any deformity.

DELEGATES TO FOREIGN SOCIETIES.

The President then announced the following as delegates to the foreign societies: Drs. T. A. Emmett. D. Lewis, W. M. Carpenter and E. M. Brush, New York; and J. M. Da Costa, Pennsylvania.

Dr. N. S. Davis then escorted the President elect, Dr. John L. Atlee, to the platform; he was greeted with loud applause, and when introduced made the following remarks:—

Gentlemen of the American Medical Association:—It is with no ordinary emotions that, by your partiality, I occupy a chair that I have seen filled by a Chapman, a Warner, a Stevens, a Knight, and a host of worthies, living and dead, who were and are the ornaments of our profession. I beg you to accept, gentlemen, my heartfelt thanks for the honor you have conferred upon me. I accept it also with gratitude, as a tribute to the memory of a dear brother, who, were he living, would more deservedly occupy this position. My chief motive in coming here on this occasion was to assist in carrying out the instructions unanimously given by the Lancaster County Medical Society, to uphold the honor and dignity of our noble profession by putting the seal of condemnation upon the recent action of a State Society, the sanction of which would have given character to a system of practice derogatory to common sense and professional integrity. All honor, gentlemen, to the report of our Judiciary Committee. In the performance of my duties I shall endeavor to be firm and impartial, and I trust that I may be supported by your kindness and courtesy in trying to uphold the right.

The thanks of the Society were tendered to the retiring President, Dr. P. O. Hooper, Arkansas, by a standing vote. That gentleman responded feelingly, and at 12.40 o'clock the motion to adjourn was made by Dr. Toner, and the thirty-third annual meeting of the Association was declared adjourned.

—On p. 633, 2d col., line 14 from bottom, for ext. felic. marisarth, read *ext. felicis maris æth.*

Medical Society of New Jersey. One Hundred and Sixteenth Annual Meeting, held at Asbury Park, May 23d and 24th, 1882.

TUESDAY, MAY 23d. FIRST DAY.

The Society convened in Educational Hall, Asbury Park, at 4 o'clock P M., and was called to order by the President, Dr. L. W. Oakley, of Elizabeth.

The Committee on Organization reported lists of delegates from the various District Societies in the State. The report included delegates from every District Society in the State, excepting Atlantic and Salem.

A cordial welcome was extended to the Society by Dr. J. H. Hunter, on behalf of the Committee of Arrangements, and by James A. Bradley, Esq., of Asbury Park, on behalf of the citizens of the Park.

Dr. Amos B. Pann, delegate from the Medical Society of Massachusetts, was formally presented to the Society, and invited to take part in its deliberations.

Dr. H. R. Baldwin, Chairman of the Business Committee, reported as follows:—

The Committee on Business recommend the following order:—

TUESDAY, 4 O'CLOCK, P.M.

Prayer. Report of Committee on Organization. Report of Committee of Arrangements. Reading of minutes of last Annual Meeting. Report of Committee on Business. Report of Delegates to Corresponding Societies. Report of Committee on Ethics and Judicial Business. Announcement of Committees by the President.

7.30 O'CLOCK, P.M.

President's Address. Report of Standing Committee (Five minutes allowed each member for remarks upon the same). Report of Corresponding Secretary. Report of Committee on Unfinished Business. Half an hour allowed for discussion upon some subject suggested at previous meeting.

WEDNESDAY, 9 O'CLOCK, A M.

Report of Committee on Treasurer's Accounts. Receiving and acting upon applications for Degree of M.D. Report of Committee on Honorary Members, and Honorary Degree of M.D. Reception of Delegates from Corresponding Societies. Investigation of By-Laws and receipt of communications from District Societies. Essay—by third Vice-president. Reading of such papers as approved by Business Committee. Recess from 1 to 3 o'clock, for dinner. Continuation of previous order. Report of Nominating Committee. Election of Officers. Miscellaneous Business. Adjournment.

The report was adopted.

The following was adopted:—

Resolved, That the Medical Society of New Jersey reaffirms its allegiance to the Code of Ethics of the American Medical Association, and views with distrust any effort on the part of legally constituted societies to deviate from or antagonize its provisions.

Communications from Hudson, Camden and Mercer District Societies were received and referred to Committee on Judicial Business.

The death of Dr. John Wright, of Freehold, was announced, and Drs. Woolverton, Phillips, Neil, English, Weeks and Dunham were appointed a committee to attend his funeral.

The following committees were announced:—

Nominating Committee—S. S. Clark, chairman, D. A. Currie, L. Jamieson, H. G. Taylor, J. S. Whitaker, G. A. Van Wagener, G. C. Laws, W. P. Watson, M. Abel, H. M. Weeks, D. C. English, J. S. Long, J. G. Ryerson, C. A. Harris, L. D. Tompkins, J. Miller, H. H. James.

On Treasurer's Accounts—J. E. Arrowsmith, W. A. P. Neil and H. H. James.

Adjourned until eight o'clock in the evening.

EVENING SESSION.

President in the chair. The president read the annual address, the subject of which was "Medical Education."

Report of Standing Committee. Dr. Kipp, chairman, then read the Report of the Standing Committee.

A résumé of the medical history of the State for the past year, as gathered from the various county reporters, shows an increase of malarial diseases throughout the State; from various portions come the report of typho-malarial cases, with a low rate of mortality.

Smallpox is reported from certain portions of the State, with a mortality of about 30 per cent. The epidemic is decidedly on the decrease.

Diphtheria and scarlet fever have been present throughout the northern counties, with a low death rate.

Typhoid fever was reported from the southern portion of the State, being particularly fatal in Ocean county.

An epidemic of catarrhal disease was reported from Camden city, peculiar in character, affecting all the mucous membranes, but of a mild type.

Dr. Hunt reports certain cases of diphtheria where, the date of infection being known, the period of incubation was determined as five days.

The following essays were reported as received by the Committee: Dr. Welch, Treatment of Uterine Hemorrhage. Dr. St. John, Diagnosis of Infantile Diseases. Dr. Currie, on Wet Nurses.

An investigation of the workings of the new medical law shows that it has not been put to the test, no convictions having been obtained, and the irregular practitioner flourishing as usual.

From Essex is reported the formation of a Society for the Relief of the Widows and Orphans of the Medical Men of New Jersey.

The deaths for the year were Drs. Wilmarth, S. S. Marcy, C. T. Morrogh, H. S. Clew, H. S. Harris, T. P. Dickerson and T. H. Stuadiford.

The Treasurer reported as follows:—

RECEIPTS—

Essex	$196.00
Hunterdon	28.00
Warren	32.00
Middlesex	28 00
Union	80.00
Sussex	50.00
Monmouth	60.00
Burlington	66.00
Passaic	80.00
Hudson	82.00

Bergen	34.00
Cumberland	34.00
Camden	78.00
Morris	64.00
Somerset	24.00
Gloucester	12.00
Ocean	10.00
For diplomas	15.00
For interest	38.00
On hand from last report	951.72
Invested in U. S. Bonds	900.00
In Savings bank	850.00
	$

DISBURSEMENTS—

To S. Wickes	$ 11.76
W. Elmer, Jr.	8.16
Wm. Penn, Jr.	9.00
Jos. Parrish	18.20
J. Toombs	7.25
Telegram	1.10
E. P. Townsend	3.00
C. J. Kipp	617.88
S. Wickes	1229.83
	$1906.18

Adjourned until Wednesday, at nine o'clock.

WEDNESDAY, NINE O'CLOCK.

The Society re-assembled. President in the chair.

Dr. Ryerson, in behalf of the Fellows, made the following report:—

PRIZE FOR ESSAY.

The Fellows of the Medical Society of New Jersey present at Asbury Park, at the meeting there of the Society, hereby propose that the Society shall offer annually, if possible, or at least biennially, a prize of one hundred dollars to the members of the several District Societies of the State, for the best essay on some selected subject connected with medical science or art; and that they will deposit, annually (or at least biennially), with the Society treasurer, the funds necessary for that purpose.

The method of competition for and of awarding this prize shall be as follows:—

A committee of three shall annually be constituted, to be called the "Fellows' Prize Committee." The retiring president of the Society shall be, *ex officio*, its chairman; a Fellow selected by his associates shall be the second member, and the third shall be a member of a District Society (not a Fellow of the State Society), selected annually by the Society's Nominating Committee. At the session of the Society when this committee shall be constituted, it shall select and announce to the Society, and promptly to each District Society, a subject for the competition for the ensuing year. And during this same year it shall adjudicate upon the essays of the previous year, which shall have been handed in to its prospective chairman (then president of the State Society) not less than two months before this same session when it was constituted.

Each essay shall be signed with an assumed name, and have a motto, both of which shall be endorsed on a sealed envelop, to accompany the essay, containing the author's name, residence, and District Society; and none of these envelops shall be opened by the Committee until after its award, and then only those bearing the mottoes and names appended to the successful essays. The committee shall select the first two essays in order of merit, reference being had, not only to the subject matter, but to the language and style of the author. To the first they shall award the prize of money, to the second, that of honor able mention. They shall notify the successful authors to be present at the next annual meeting of the State Society, and give to the President the names of these authors, with their assumed names and mottoes.

The President shall announce to the Society, at that annual meeting, the authors, with their mottoes and nommes de plume, and before the whole Society, with some suitable ceremony, shall make the awards. The unsuccessful authors shall receive back their essays, upon their identification to the Chairman of the Committee, but the successful essays shall be the property of the Society, and shall be published in the "Transactions." No award shall be made unless the merits of the essays shall be of a decided character; and in this case the money shall remain in the treasury, until applied for a subsequent award.

The Fellows then announced the following subject, for the ensuing year, viz: "The Importance of Exploration of the Urine, both Chemical and Microscopic, as an Aid to Practice, and the Relation of Hæmaturia to Diseased Process."

Upon the nomination of the Fellows, the following Committee of Adjudication was appointed for the ensuing year: L. W. Oakley, *ex-officio* chairman, Henry S. Baldwin and James S. Green.

The report was accepted and the recommendations, by vote, were unanimously adopted.

The committee appointed to report upon the comparative value of humanized and bovine vaccine virus, and the best security for their purity, respectfully submit that they have received communications from the reporter of only one District Medical Society, Dr. Snowden, of the Camden District Society, and that the question was discussed at one of the meetings of the Mercer District Medical Society. Dr. Snowden writes that he had endeavored to obtain the opinion of each member of the Camden District Society, and that three-fourths of those from whom he had received replies preferred humanized virus. Most of these gentlemen are residents of the city of Camden, where a severe epidemic of variola prevailed more than a year ago. He writes that the objections to bovine virus are its want of reliability and the irregularity of the results obtained. At the discussion at the meeting of the Mercer District Medical Society there was a pretty general agreement as to the want of reliability of the bovine virus and the irregularity in the development of the vaccine disease resulting from it. Your committee have very little to add. In their own experience they have had a large percentage of failures in the use of bovine virus in primary vaccinations, the operation having to be repeated once, twice, or oftener. The period of development they have found to be by no means uniform, and the local and constitutional effects have often been severe and troublesome. They

prefer well selected humanized vaccine; but on the outbreak of an epidemic of variola they recognize the necessity of recourse to bovine virus, and the renewal of stocks of humanized vaccine requires occasional resort to it. The only security now existing for the purity of bovine virus is the prevailing standard of commercial morality, a very unsatisfactory ground of security. Your committee are of opinion that the establishment of a vaccine farm under the direction and control of the State Board of Health would afford a better and more reasonable security for purity and reliability of supply of bovine virus; and that the organization of the State Vaccine Establishment might prove to be a wise expenditure of public money.

JOHN W. WOOLVERTON,
WM. ELMER, JR.,
J. L. BODINE,
Committee.

Dr. D. C. English read a paper, entitled, "The Prevention and Limitation of Epidemics."

The writer called attention to the necessity of a public education in sanitary science, through the public schools; to the necessity of general legislation for the establishment of strict quarantine against infected ports, and of State legislation quarantining infected houses and keeping pupils from such houses out of the schools.

He spoke of the good work our own Board of Health has effected, the efficient legislation we possess, and called upon the medical profession to bring to bear its influence in such matters upon the masses, for the purpose of creating a public opinion in favor of measures of sanitary reform. That they should favor drainage, proper sewerage, pure water supply, isolation of sick, vaccination, and all other measures looking toward the limitation of epidemics.

The degree of Doctor of Medicine was conferred upon A. G. Schuhl, of Jersey City, and Vincent Nager, of Newark.

The report of the Committee on Honorary Membership was received.

Dr. Barker, of Morris, read a paper, entitled the "Vaccination Question," which was well received and a copy requested for publication.

A discussion upon the subject of Vaccination, in which many of the members took a part, was then entertained. There appeared to be quite a divided opinion as to the comparative value of humanized and bovine virus.

Dr. Chandler, of South Orange, read an interesting paper on Nerve Stretching.

After a general description of the anatomical lesions, there was given a valuable table of three hundred cases, with the results in neuralgias, spasmodic affections, tetanus, locomotor ataxia, etc., and finally a comparison and discussion of the general opinion of the operation.

The lesions caused by the operation are a loosening of the nerve in its sheath, extravasation of blood in the sheath, dilatation of the blood vessels, rupture of a portion of the nerve fibres, and, occasionally, nutrition changes. Stretching acts especially to interrupt the sensitive current, but allows the motor current to pass. The motor current and reflexes are more affected by centrifugal than by centripetal traction. Stretching acts on the nerve centres, producing certain dynamic changes, and occasionally local disturbances, more or less persistent.

There was a table given, of three hundred and twenty cases, as follows:—

Sciatica	57 cases,	91 p. c. cured.
Neuralgia of fifth pair	27 cases,	48 p. c. cured.
Traumatic neuralgia	16 cases,	75 p. c. cured.
All other neuralgias	33 cases,	66 p. c. cured.
Mimic spasm	13 cases,	85 p. c. cured.
Torticollis	10 cases,	60 p. c. cured.
Traumatic tetanus	49 cases,	20 p. c. cured.
Locomotor-ataxia	49 cases,	32 p. c. improved.

Cases of peripheral paralysis, and epilepsy with aura, have been greatly benefited.

In concluding, the Doctor said, "While nerve stretching may not accomplish all that its most ardent advocates claim for it, we feel confident that an operation that develops so much statistical strength has enough of real merit to outlive opposition, and take its place among accredited surgical operations."

Dr. Ill, of Newark, read a paper on Laceration of the Cervix. He reported forty-four cases, with thirty-nine cures, and five cases of non-union. Of these, thirty-seven were relieved entirely of the symptoms. The symptoms noted as following the lesion were anteversion, retroversion, subinvolution, complete prolapsus of body, chronic ovaritis, fungoid degeneration of endometrium, menorrhagia, pain on connection, and loss of sexual desire. This last symptom the writer had specially examined. It was present in thirty-four cases, and was relieved in twenty-seven; thirteen cases became pregnant after the operation; of these, only one was examined after delivery, in which case a new laceration had taken place posterior to the line of union of the operation.

The Doctor enthusiastically commends the operation as one redounding with good to the patient and credit to the operator.

A paper by Dr. C. J. Kipp, on traumatic rupture of the drum, was read by title and referred to Committee on Publication.

OFFICERS ELECTED.

President, J. W. Snowden; 1st Vice-President, S. Wickes; 2d Vice-President, P. C. Barker; 3d Vice-President, Joseph Parrish; Corresponding Secretary, Wm. Elmer, Jr.; Recording Secretary, Wm. Pierson, Jr.; Treasurer, W. W. F. Phillips.

Standing Committee, C. J. Kipp, S. S. Clark, and E. J. Marsh.

Delegates to American Medical Association, B. A. Watson, James Green, George Bayles, W. G. Taylor, J. E. Arrowsmith, A. W. Rogers, J. M. Woolverton, H. C. Clark, J. Johnson, C. Shepard, W. H. McGee, J. A. Ayres, T. L. Jamieson, H. Vanderveer, Wm. Elmer.

Delegates to Medical Society of Rhode Island, H. H. James, C. H. Sproul.

To Medical Society of Pennsylvania, W. W. F. Phillips, H. M. Weeks, T. R. Varick.

To Medical Society of Connecticut, D. C. English, D. M'Lean Forman, H. G. Buckingham.

To Medical Society of Massachusetts, C. F. Stillman, D. A. Currie, A. C. Hunt.

It was voted that the next annual meeting be

held at Atlantic City. That the annual assessment be one dollar and a half per capita. The next meeting will be held on the second day in June, 1883. Dr. George Bayles was appointed essayist.

Drs. James, Halsey, Rankin, Currie and Clark, were appointed a committee to investigate when, and of whom, good, reliable and pure vaccine virus may be obtained.

The following, offered by Dr. J. H. Pennington, was adopted:—

Resolved, That the delegates from this Society to the American Medical Association be instructed to resist any effort to alter the Code of Ethics in such manner as to authorize members of the profession, or any Medical Society in affiliation with this Association, to encourage or permit its members to hold professional intercourse with men who repudiate the scientific principles of medical practice recognized by the said American Medical Association.

The following Committee of Arrangements for the next annual meeting was appointed: H. G. Taylor, J. W. Snowden and F. Gauntt, with power to add to its number.

Adjourned.

Testimonial to Professor Leidy.

The following circular, which explains itself, we are glad to insert, as it does honor to one to whom all honor is due:—

PHILADELPHIA, May 1st, 1882.

There is a widespread feeling that the pre-eminent services rendered to science by Professor Joseph Leidy are such as to call for a suitable and substantial acknowledgment.

He has held the Chair of Anatomy in the University of Pennsylvania for thirty years; and, in addition, the Professorship of Natural History in Swarthmore College for twelve years.

As an anatomist, the foremost place is conceded to him; and as a scientist his fame is world-wide. His contributions to Natural History have ranked him with such naturalists as Cuvier, Agassiz, Owen, and Huxley.

About to enter his sixtieth year, it is felt that the time has come to provide a testimonial which, while expressing the admiration of those who unite in it, for his disinterested and self-sacrificing devotion to science, will relieve him from some elementary teaching and enable him to devote himself hereafter to those fields of profound investigation in which he is unrivaled. This is the more necessary because the system of education conducted in the Medical Department of the University of Pennsylvania has been so greatly changed as to demand from both teacher and student far greater efforts than formerly. It is intended to still further enlarge and elevate the course, so that it shall compare favorably with the highest instruction in European schools. Such changes involve increased expenditures, and a temporary reduction in the receipts from tuition fees. Consequently it becomes doubly important to secure endowments for those chairs which, like that of anatomy, demand the entire time of their occupants. It is proposed, therefore, that the sum of $100,000 shall be raised, the interest of which shall be annually paid to Prof. Joseph Leidy during his lifetime; and that, after his death, the said income shall be applied in perpetuity to the maintenance of the Joseph Leidy Chair of Anatomy, in the University of Pennsylvania. The names of the contributors will be perpetuated in a suitable manner.

Subscriptions to this fund will not be binding until the amount of $25,000 is secured; although it is hoped they will be paid promptly, as they will be invested immediately and become effective. Subscriptions may be made payable during the present year, or in two annual installments.

Rt. Rev. Wm. Bacon Stevens, S. D. Gross, M.D., A. J. Drexel, Alfred Stillé, M.D., Henry C. Gibson, H. C. Wood, M.D., S. Weir Mitchell, M.D., Spencer F. Baird (Smithsonian Institute), John Welsh, George W. Childs, D. Hayes Agnew, M.D., Rev. John S. Macintosh, Fairman Rogers.

All subscriptions should be sent directly to

WILLIAM PEPPER, M.D,
1811 Spruce street.

The prospect for this fund is reported as very encouraging.

How to Cook Rice.

Rice is becoming a much more popular article of food than heretofore. It is frequently substituted for potatoes at the chief meal of the day, being more nutritious and much more readily digested. At its present cost, it is relatively cheaper than potatoes, oatmeal or grain-grits of any kind. In preparing it only just enough cold water should be poured on to prevent the rice from burning at the bottom of the pot, which should have a close-fitting cover, and with a moderate fire the rice is steamed rather than boiled until it is nearly done; then the cover is taken off, the surplus steam and moisture allowed to escape, and the rice turns out a mass of snow-white kernels, each separate from the other, and as much superior to the usual soggy mass, as a fine mealy potato is superior to the water-soaked article.

Vaccine Farms.

The following, which we take from the *National Board of Health Bulletin*, May 7th, 1882, will do much to explain why some vaccine virus does not afford protection. Dr. P. H. Bailhache makes this report: "The so-called 'Maryland Vaccine Farm' is located at Contee's station, on the Washington branch of the Baltimore and Ohio railroad, about 16 miles from Washington. I found a colored woman in charge of the farm-house, who, upon my inquiring for Dr. Register, informed me that he had not been at the farm for some months, and she believed he was in Florida, on account of ill health. I then inquired whether the farm was in operation, and she replied that they had been vaccinating calves all winter. Upon further inquiry, I learned that a colored man came down from Baltimore, to vaccinate such stock as could be hired for that purpose, from time to time (the woman said he was the Doctor's driver); that another colored man assisted in the work: that in a short time, ranging from a week to ten days, the 'Doctor's man'

returned to the farm and collected the virus, and that no doctor had been present at any of these operations for some time past. I visited the stable, an ordinary farm stable, which was large and well located, but the accumulation of manure in the rear of the building was very offensive. There was no stock in the stable, but running at large was a young calf, whose unprotected scarifications gave evidence of the recent operations of the vaccinators. Upon making inquiry at Baltimore, I learned that this farm is a private enterprise, and has never been a State institution, or under State supervision of any kind. Its owner was, until quite recently, State agent for furnishing vaccine, and I understand still advertises the article for sale."

Myopia in France.

It is stated in the report of the committee which was appointed some time ago by the French Government to inquire into the prevalence of short-sightedness among the youths at the great Government schools in France, that the cause of the infirmity is to be found in the fact that the school books are printed in type which is too finely cut, and further, that the custom of printing upon white paper is still more hurtful. They recommend, therefore, that the authorities should consider the advisability of substituting thicker characters in the books, and also printing in white letters upon tinted paper.

Burning of the Hygienic Exhibition at Berlin

The Grand Hygienic Exhibition of Berlin, which was to have opened on May 15th, was totally destroyed by fire, May 12th. The exhibits were very fine, and comprised a varied assortment of all known sanitary appliances. The buildings and contents were reduced to ashes.

Items.

—The Professorship of Anatomy in the Harvard Medical School has had but three incumbents in the century of its existence—Dr. John Warren, Dr. John Collins Warren, and Dr. Oliver Wendell Holmes.

OBITUARY NOTICE.

SIR JOHN ROSE CORMACK, M.D. F.R.C.P., F.R.S.E.

This distinguished gentleman died in Paris, May 13th, from chronic disease of the prostate and bladder. Born March 1st, 1815, he graduated in medicine from the University of Edinburgh in 1837. His special aptitude for editorial work caused him to turn his energies in that direction, and in 1841 he established the *Edinburgh Monthly Journal of Medical Science*, now well known as the *Edinburgh Medical Journal* Four of the volumes of the New Sydenham Society's translation of Trousseau's *Lectures on Clinical Medicine* were written by him. In 1869 he removed to Paris and began the practice of medicine there, graduating from the University of France in 1870. On the approach of the German Army to Paris, in 1870, Dr. Cormack dismissed several of his family to England, and, with his wife, one son—the late Dr. J. R. Baillie Cormack—and one daughter, remained throughout the siege, during which he rendered eminent service, not only to the wounded, both on the field and in the ambulances, but also as one of the committee formed for the purpose of affording relief to the distressed British residents—an object in which much valuable aid was rendered by the liberal generosity of Sir Richard Wallace. During the terrible scenes of the Commune he remained at his post, affording professional aid to the wounded of both sides, some of whom he received in his house in the Rue d'Aguesseau, while others were placed in a house in the vicinity, occupied as a hospital. After the restoration of peace, his services to the French and to his countrymen were recognized, by the Governments of both countries. In 1871 the French Government made him a chevalier of the Legion of Honor; and in 1872 Her Majesty the Queen conferred knighthood on him. In the letter informing him of his enrollment as a member of the Legion of Honor, M. Jules Favre, the Minister of Foreign Affairs, wrote to him: "For the devotion with which you have cared for the French wounded and dying, whom you have sought on the field of battle, and so faithfully attended in the British Ambulance, France is grateful to you." When the Hertford British Hospital was established in Paris, through the munificence of Sir Richard Wallace, Sir John Rose Cormack was appointed one of the physicians, and held office up to the time of his death. From 1871 to the present time he had a considerable amount of practice, and was held in high regard both by his patients and by his English and French professional colleagues. In 1872, he was elected a Fellow of the Royal College of Physicians of London.

QUERIES AND REPLIES.

J. N. R. is informed by a very large number of our readers that they have known of instances where twins have grown to maturity and have both had families.

T. C. W. would like to have a formula for the use of chrysophanic acid, as a lotion in eczema.

J. W. C. desires to know if any of our readers can furnish him with a sure plan by which a chill can be averted or broken up without the use of quinine or any preparation of cinchona.

N. G.—The authority from which we noted Billroth's Anæsthetic Mixture did not state the point you desire, but we should presume that it is made by measure.

MARRIAGES.

LEAL—AYRES.—On Thursday, May 4th, at St. Luke's P. E. Church, Brooklyn, by Rev. Geo. R. Van Dewater, Malcolm Leal, M.D., of New York City, and Princess K., daughter of Mrs. M. A. Ayres, of Ithaca, N. Y.

WILLITS—McVEIGH.—On Thursday, April 20th, 1882, by the Rev. William V. Kelly, of Brooklyn, assisted by the Rev. A. A. Willits, D.D., Charles H. Willits, M.D., and Clara N. McVeigh, grand-daughter of the late John Whiteman.

ZERNS—COON—April 26th, 1882, at the First Presbyterian Church, Watertown, N. Y., by the Rev. S. A. Hayt, William M. Zerns, M.D., and Anna J., eldest daughter of E. S. Coon, of Watertown.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1321.] PHILADELPHIA, JUNE 24, 1882. [Vol. XLVI.—No. 25.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

EPIDEMIC DYSENTERY,

AS IT MANIFESTED ITSELF IN TRENTON AND A PORTION OF GIBSON COUNTY, TENN., IN THE FALL OF 1881. ITS HISTORY AND ETIOLOGY.

BY T. J. HAPPEL, M.D.

Read before the Medical Society of Tennessee, April 10th, 1882.

(*Concluded from page* 648).

It is true, that Cases Nos. 1, 2, 3, 6, 7 and 8, of the fatal series, might possibly, of an ordinary year, have been attributed to malaria chiefly, but those neighborhoods had had, during the year, so far as I can ascertain, scarcely any ordinary manifestations of the baneful influences of malaria.

In two of the cases, Nos. 2 and 3, the drinking water might have aided in developing the disease, but that could not have been the sole, or even chief, cause, as we would have reasonably expected the adult members of the family, or at least some of them, to have developed the same trouble, which was not the case.

A few cases, my own included, might have resulted from imprudent eating, but by far the larger number of those affected were as prudent in their eating as usual.

The epidemic cannot be accounted for upon the theory of contagion, for although, in many cases, several members of the same family suffered, often in succession, yet neighbors and visitors escaped, though frequently in contact with the disease; and further, cases of the disease occurred simultaneously at too many different points, in persons who had not come in contact with the disease or each other, to give any weight to the idea of contagion.

Case No. 1 was visited by a large number of friends, none of whom contracted the disease.

We would also conclude that no other local or endemic causes existed to give rise, *per se*, to the disease, for there have been, as already stated, only a few sporadic cases presenting themselves, for years, in this city.

Nor can the idea that epidemic dysentery is essentially a filth disease be sustained by any of the facts in this outbreak of the disease.

In 1874 we had a longer drought, but different in many essentials from this one of 1881, but no dysentery resulted.

And, again, were it a "filth disease," due to the concentration of surface decomposition and its conveyance into our water supplies, and from them into our systems, dry seasons ought to produce dysentery, and the disease ought to be epidemic, or the number of cases constantly on the increase in the larger cities; but the reverse of this is true.

Epidemic dysentery, and, to a great extent, sporadic dysentery, has almost disappeared from London (see Watson's Practice of Physic), Philadelphia and New York.

I might cite other facts, but am consuming too much time.

I do not deny that malaria aids very materially in putting the system into such a condition that the disease may occasionally occur, but in addition to this as a first cause, or rather, *one* factor, and errors of diet, exposure to cold, etc., as a *second* factor, there is yet needed *another something*, a "TERTIUM QUID," to bring about, in con-

junction with the other causes, an epidemic of dysentery. Without it only sporadic cases occur.

This "tertium quid" I claim existed and is found in the peculiar atmospheric conditions which were present during September and October, 1881, and that the only solution presenting itself for so widespread an epidemic was and is, *the influence of the high and variable temperature and the meteorological changes, upon those exposing themselves to them.*

From July 1st to the middle of September there had fallen scarcely half an inch of rain in all. The weather had been hot and dry. The ponds of stagnant water evaporated rapidly, so that by August 1st the decay of vegetable matter ceased.

After this long drought, we had a few light rain falls early in September, and then on September 15th a good rain. After a few cool days the hot term took a new lease upon life. Every one became relaxed and enervated. The physical man was soon in a good condition to take on disease of any kind. Supervening upon days of this kind came cool nights; especially were the thermometric variations great toward daylight. The surface capillaries becoming contracted under the stimulus of this cool temperature toward morning, a determination of blood to the internal organs took place. A repetition of this routine day after day, and night after night, soon brought the system in just such a condition that any exciting cause could produce the disease under consideration.

To state my idea a little differently, and to reason upon it a little further:—

The circulation of the abdominal viscera being, so to speak, under the control of the liver, this determination of blood to the internal organs caused a congestion of the liver proportioned to the amount of determination; now, whatever produces a congestion of that organ deranges this portal circulation and produces a general portal congestion, and a frequently recurring portal congestion was, of course, followed by as frequent a congestion of the mucous membranes of the rectum and descending colon, as well as that of the balance of the alimentary canal.

The venæ portales being unsupplied by valves, the capillary congestion was most marked in those portions where gravity brought to bear the heaviest forces; hence, was greatest in the mucous lining of the rectum and descending colon.

Now, having stated as briefly as possible my idea of the cause of the epidemic, and its modus operandi, let us study, for a while, the conditions of the atmosphere, with its changes, as shown by the thermometer, barometer and hydrometer.

Having stated, in general terms, the status from July 1st to September 1st, we will begin a more minute examination from September 1st, as, prior to that time but few sporadic cases of the disease occurred.

From September 1st to 10th the average maximum temperature was 93$\frac{1}{2}$°; the average temperature at 6 a.m. was 73$\frac{1}{2}$°, making an average daily variation of 20°. The maximum temperature was 97°, the minimum 69°, making a variation between the two extremes of 28°. For the five days following the 10th, the average maximum temperature was 72°, the average minimum temperature 63°, making a variation of only 9°; but taking the two extremes, at noon on the 13th, the maximum temperature was 94°, and on the morning of the 12th 56°, thus making the greatest range 38°. On the 15th, as previously stated, a good rain fell, and on the 16th the minimum temperature was 58°, and the maximum 71°, a variation of 13°. On the 17th the maximum temperature was 74°, the minimum 52°, a variation of 22°. From the 17th to the 21st the average minimum temperature was 59°, the average maximum 78°, the average variation 19°. The lowest temperature was 52°, on the 17th, and the highest 84°, on the 20th; thus making the greatest variation 32°. From the 17th to the 22d the morning temperature gradually increased to 66°, while the noon temperature rose to 86° on the last named day.

From the 22d to the 26th, inclusive, the 6 A.M. temperature gradually increased from 66° to 74°, while the noon temperature went to 90° on the 25th, making a difference of 38° between the minimum and maximum temperature in eight days. On the 26th the maximum temperature dropped to 74°, to be followed at once by a daily increase of from 3° to 5° in maximum temperature to the 29th, reaching 86°, giving a variation of 21° between the two extremes of that day.

The barometric changes from September 1st to 13th were very slight, and with the exceptions of the 3d and 4th, not falling below 30, but at the same time the hygrometric variations were decided; especially was this the case on the 4th, when the humidity at 6 A.M. was 88.6, while at 2 P.M. it was only 37.4, a difference of 51.2.

The 14th and 15th were days of considerable barometric changes, with rain on the latter day, followed by a rising barometer and increasing temperature on the 16th. On the 17th a stationary barometer, but humidity varying from 91. at

6 A.M., to 27 at 2 P.M., being a change of 64. On the 26th a falling barometer and increasing humidity, the average being 83.

October opened with a morning temperature of 70°, rising to 84° on the same day, and to 88° on the next; then to fall to 56° on the evening of the 5th, giving a variation of 32° in four days, converting a late fall month into one of midsummer heat.

On the 6th the morning temperature was 54°, and at midday 75, making a variation of 21° in six hours. On the 10th we find the morning temperature 59°, and on the 11th 55°, with a maximum on the latter day of 80°, making the range 25° for that day. The 12th, 13th, 14th, 15th, and 16th are noted for their great range of temperature, rising on the latter day to 85°, to drop on the 17th, in the evening, to 54°, and on the morning of the 21st to 43°, showing a difference of 40° in five days, with a variation of 18° the next day. From the 23d to the end of the month the temperature was much more uniform, the greatest variation in the daily mean temperature being 6°. The changes of the barometer were slight in October, to the 23d, and from that time to the end of the month very variable and uniformly low.

The hygrometer showed but slight changes to the 12th, and then they became marked, being 24 on the 13th, 31 on the 14th, 42 on the 15th, 38 on the 16th, attaining a maximum variation on the 20th; on that day being 88½ at 6 A.M, and 39 at 2 P.M.

From that time onward the variations in humidity were not so great till the 26th, when we find the variations 51, with a decrease in variation until the end of the month.

November opened with a variation of 21° between the extremes of temperature, to be reduced the next day to 19°, with a further decline in the morning temperature on the 4th to 40°, making in four days a difference of 29°, changing from summer's heat to frost on the 4th. From that time on the temperature, though moderately high, continued uniform. November will be remembered as a warm month up to the 20th.

Both the barometer and the hygrometer varied much from the 1st to the 10th of November. The variation between the two extremes was .614 inch, and of the hygrometer 58, with a daily variation on the 1st of 47.

Now, the variations in temperature given have been ascertained by comparing the minimum and maximum temperature, as read from a thermometer not exposed in any way to the direct or indirect rays of the sun. If, then, to the variations already given, we add about 20° increase in heat to which those were exposed who were unprotected from the midday's sun, the gap between the daily minimum and maximum temperature becomes enormous, reaching in some cases to upward of 50°.

With this amount of daily variation, and its consequent effects upon the human system, I see no trouble in accounting for the epidemic under consideration.

Let us study a little further, first, the fatal cases already cited, and further facts will be found to warrant the assumption that the "tertium quid" giving rise to the epidemic was the unusual and excessively high and variable temperature.

Of the fifteen fatal cases reported, six were adults, four males and two females, but all of such stations and conditions in life, and following such vocations, except one, as to necessitate an active out-door life, exposed to these decided variations in temperature; four were children, ranging from four to seven years of age, just the age at which it is impossible to restrain a vigorous, active child; four of the remaining ones were old enough to be in and out of doors at all times; and only one was too young to be exposed much.

A majority of the deaths in this series took place from October 1st to the 20th, and several others in the last week in September—the very time at which the temperature was highest and the atmospheric changes greatest. Then, too, according to my own observations, confirmed by those of Drs. Moore and Bright, the epidemic was most extensive about the same time.

As has already been remarked, the week succeeding the Fair was one of greatest suffering, and by examining the weather statistics given, it will be seen that from October 11th to 25th the changes were great and sudden. Then, too, at this particular date more persons were exposed to those changes than at any other time during the fall.

Frequently those persons who had any distance to travel started early, were then exposed to the cool morning air; at noon were frequently in the direct rays of the sun, and returning through the dust in the evening, were out in the sultry night air.

Again, the large majority of those who escaped any enteric trouble were persons whose vocations were such as to keep them indoors, or whose circumstances in life were such as not to force them to labor and expose themselves.

In conclusion, I do not pretend to claim that

the high and variable temperature and atmospheric changes were *alone* the causes of the disease, but that it was the great predisposing agent, the factor which put the systems of so many in just such a condition that any exciting cause could and did give rise to the epidemic.

Malaria aids, and so does exposure to cold, errors of diet and similar causes, as set forth in our works on diseases; but these, of themselves, can never give rise to an *epidemic* of dysentery.

As already stated, these causes can produce only sporadic cases. Malaria, too, would be a complication, and often a grave one, in epidemic dysentery, and, had it existed as an important factor in the disease of this year, in my opinion, the epidemic would have numbered its victims by the scores.

But let all these minor factors be present, and no high, variable temperature and atmospheric changes present themselves, and you have no *epidemic dysentery;* but let the latter factor, the *tertium quid*, be present, then, almost any one, or, at most, two of the former factors will kindle up the epidemic.

Hospital Reports.

UNIVERSITY OF THE CITY OF NEW YORK.

CLINIC OF J. WILLISTON WRIGHT, M. D.

Professor of Surgery.

Lupus Non-exedens.

Gentlemen:—There is a dearth of material at our clinic to-day, but we will present such as we have. The first patient is a man fifty-five years of age, who says that about two years ago he received a slight injury on the side of the nose, which developed into a warty excrescence, at first about the size of a bird shot, but having now extended until it covers a space larger than your thumb nail. On picking off the outer wart like crust there is exposed beneath fungus-like granulations. It has all the appearance of lupus of the nose, a favorite locality for that disease. You will remember that there are two varieties of lupus, one a slow, quiet form, which does not show any marked tendency to ulcerate, or rather to destroy the tissues; consisting of a ragged, rough surface, without any ulceration, whatever, and fringed at the margins with a quantity of small, tubercular-looking bodies, of a red color, and outside of this, adjacent to the margin of the disease, a desquamation of the skin. This form is known as lupus non-exedens. The other form is known by the various names of rodent ulcer, lupus exedens, *noli me tangere*, etc. The latter form is characterized by rapid progress, by its tendency to destroy everything which comes in its way—not only the skin, the connective tissue, and the cartilage of the nose, if it happens to be in that portion of the face, but finally even the bones, so that sometimes it produces the most frightful ravages on a man's face, eating out the whole cheek, carrying away the bones which form the floor of the orbit, a good part of the upper jaw, and sometimes allowing the eye itself to drop down into this frightful chasm which has been made by the progress of the disease. It reaches this aggravated stage generally within a very few months.

Very often the two forms seem to be intimately associated with one another. For example, we find here unquestionably an example of the milder variety of the disease known as lupus, but we have no guarantee that, at any time, it may be next week, next month, or next year, this condition may not pass into the other. It seems proper, therefore, to make some effort to relieve the man of this growth while it is in this comparatively harmless condition.

Now, there are two or three ways of dealing with it; we may, for instance, encircle the mass with the point of the knife, and dissect that portion of the skin and connective tissue out. Then we may close up the opening thus made by sliding the integument over a little, doing some plastic surgery, or what would probably be better, inasmuch as we are dealing with a disease which has a certain amount of malignancy about it, to say the least, treat it as an open wound, and allow it to granulate. On the other hand, we can destroy the growth by the use of an escharotic, and this is the treatment which I think is proper to make use of in this particular case. We will simply lift the dry crust which has formed over the disease, scraping it with the scalpel, and then apply, pretty thoroughly, some powerful escharotic; for this purpose one of several different kinds of escharotics may be used. A favorite one with many surgeons is what is known as butter of antimony, which is applied with a little swab, as a piece of cotton wrapped round the end of a stick, or applied with a glass brush, or by other means. Another very good escharotic consists of a saturated solution of chromic acid. This, perhaps, is not as painful as the butter of antimony, and at the same time, I do not think it is as effectual in its results. Another is what is known as Vienna paste. The acid nitrate of mercury is a powerful escharotic, and may be applied in the same way as butter of antimony. There is, however, a particular escharotic which I wish to try the effect of in this case, namely, what is called chlor-acetic acid, which looks in the bottle, as you see, very much like water, but which has very powerful caustic effects. I have found it the best substance that I have used for the treatment of papillary tumors, such as warts, etc. Of course, this substance will produce some sloughing of the tissues. After the application the sore will be treated by a piece of lint spread with the nitrate of mercury ointment, full strength. At the same time the patient will be put upon constitutional treatment, say ten drops, three times a day, of Donovan's solution, that is the iodide of mercury and arsenic; it may also be well to give him some preparation of iron.

If the fungous mass springs up again it will be treated in the same way.

Arthritis.

Our next patient is a man forty-two years old, a peddler by occupation, who slipped and fell on the stairs, in the latter part of January, 1882, striking his left shoulder on the edge of the stairs.

On comparing the shoulders one with the other, you will observe that there is a greater prominence, a protuberance, at the junction of the scapula and acromion process. You will also observe a slight spasmodic contraction or twitching in the triceps muscle. In evidence that there is no dislocation of the humerus, you see we are able, after placing the left hand on the opposite shoulder, to bring the elbow down against the walls of the thorax. Another test for dislocation at the shoulder is to lay a straight surface, as a ruler, against the external condyle of the humerus below, and if possible, the other end against the acromion process above; if there be no dislocation, the round head of the humerus will so project as to make it impossible to bring the upper edge of the ruler against the acromion process, while the edge below lies against the external condyle: but if there be a dislocation of the bone out of the glenoid cavity, in almost any direction, this can be effected. Still another test consists in taking the circumferential measurement of the shoulder, comparing it with the opposite side. It is not as absolute a test as are the others, because the man may be differently developed on the two sides. But when it is remembered that in dislocation there is an increase of about an inch and a half or two inches in the circumference of the shoulder, it becomes a pretty positive test, for it is not likely that a man will be so unequally developed as to make so great a difference. In this case the measurement outside of the prominence on the right side is fifteen inches, while on the left, the affected side, it is only fourteen and three quarters inches. Certainly, then, there is no dislocation. Nor is there any paralysis of the deltoid muscle, for the man is able to lift his hand above his head. You will observe that we are eliminating everything that it may be, and bringing it down to the only thing which it can be; in other words, we are making the diagnosis by exclusion.

The next thing to be considered is, whether there may not be some inflammatory action going on in the joint. When I rotate the bone in the glenoid cavity the patient does not complain of it at all, except when I bring a strain upon the particular prominence before mentioned. So far as the shoulder joint itself is concerned, there seems to be no trouble going on there. There is not only no pain on rotating the humerus, or on pushing it solidly into the socket, but there is no crepitus whatever. Therefore we can be certain there is no erosion here, of the cartilages, nor effusion into the joint.

Then we come to consider the point at which pain seems chiefly to centre, namely, just at the articulation between the acromial end of the clavicle and the acromion itself. Now, we may possibly have fracture of the clavicle here, which gives rise to this prominence; it may be possible to have fracture at so close a point to the articulation. But we find no evidence of this on examination; there has been no callus thrown out, causing any enlargement of such a nature, but there would have been some, even had the bone become very closely and smoothly united. If there were dislocation of the clavicle with the acromion process, either by slipping above or below it, there would be a difference in measurement from the centre of the sternum to the acromion process on the two sides. But here we find the measurements exactly the same. Besides that, if there were dislocation under the acromion, this process would ride up abruptly; or if a dislocation over it, there would be a similar elevation or overriding of the clavicle.

Therefore, gentlemen, we will put this case down as one simply of arthritis, and I think it very doubtful whether the injury which the patient sustained in January is wholly responsible for it. It may be, but I think it quite as likely that this inflammatory action about the joint, which has thickened the cartilaginous surfaces, and probably also the synovial membrane, has another origin, probably in rheumatism. The injury may have been the starting point, the exciting cause, but not the predisposing cause.

The treatment will consist in the administration of the iodide of potassium, five or ten-grain doses three times a day, and the application in this locality of a series of small fly blisters. Put on one to-day or to-night, perhaps three inches square, and after it has been on about eight hours puncture the vesication, letting the water out, and dress it with simple cerate, or combined with a little morphine, to make it more anodyne. Continue so to dress it until the blister heals, and if then, after two or three days, the pain and tenderness do not subside, put on another, and so repeat the process, if necessary, until the patient has had six or more vesications. If he be faithful in this treatment, I think that after awhile the pain will subside, and probably considerable absorption and decrease in the enlargement will take place.

Inguinal Hernia.

This man is employed about machinery, and some time ago noticed a tumor in the inguinal region, which has been getting larger. On examining this tumor we find that it does not extend down into the scrotum; that it is tympanitic on percussion; that it has a distinct impulse when he coughs. I will answer my own question as to whether this hernia is direct or indirect, by saying that it is a question difficult to decide in the living subject like this, and it is for this reason that, in a strangulated hernia, we cut directly upward, for we know not on which side of the epigastric artery the gut lies. In an old hernia like this, if it be through the internal abdominal ring, the two rings will probably be so closely drawn together, by the weight of the hernial mass, as to make it very difficult to decide whether it be a direct or indirect hernia. In the case of this patient the hernia is very easily reduced, and goes back with a very distinct gurgling noise. It can be made to come and go at pleasure as he lies down, and coughs. Invaginating the scrotum, and introducing my finger into the external ring, I find it greatly enlarged; this can be felt easily, also, without

invaginating the scrotum, and the hernia seems to have come directly through Hesselbach's triangle.

This man needs a good, strong truss, with a stiff spring, and a rubber water bag or air pad, so as to thoroughly prevent a protrusion of the hernia. He says he is too poor to purchase one.

He will be supplied with one free, by going to the Institution for the Crippled and Ruptured, Lexington avenue and Forty second street but it is not to be supposed they can afford to give away trusses of the highest quality, such as this man ought to wear.

Medical Societies.

PHILADELPHIA COLLEGE OF PHYSICIANS.

Remarkable Case of Sacculated or of Cirsoid Aneurism of the Second Interosseous Branch of the Deep Palmar Arch, Treated by Excision; with Exhibition of the Specimen.

BY JOHN B. ROBERTS, M.D.,

Lecturer on Anatomy and on Operative Surgery in the Philadelphia School of Anatomy.

Read May 3, 1882.

The specimen which I exhibit this evening, and its accompanying history, are interesting, I think, because of the extreme rarity of the condition. I know of no similar case reported; but I have not had an opportunity to search for such in medical literature, because the operation was performed only a few hours ago. The specimen is fresh, and is exhibited now before the appearances have been changed by any preservative fluid.

Dr. Charles H. Thomas requested me, a few days ago, to assist him, at an early date, in operating upon a tumor of the hand in a boy, aged sixteen years. From his earliest childhood he had been under Dr. Thomas's observation, and had had a small elongated tumor upon the *dorsal* surface of the first phalanx of the left ring-finger, while in the *palm*, at the junction of the bases of the middle and ring-fingers, was a larger swelling. These were considered masses of dilated veins, as they had a spongy feel, and at times showed a bluish color. There was no very definite connecting band of swelling between the dorsal and palmar enlargements. No special pain was experienced, unless the parts were struck, and no marked growth occurred. Hence the child's mother was advised to have nothing done. As the boy grew, the hand and tumor increased, but held the same relative proportions. When the boy began work in a machine shop, the skin became thickened and soiled, and the bluish tint was no longer discernible.

About two months or less ago the growths seemed to enlarge and to be accompanied by considerable pain, and Dr. Thomas advised the use of a compress in the palm and a bandage around the finger. This the boy wore at nights, and usually from Saturday to Monday morning, when he returned to his work. Recently there was noticed pulsation in the palmar tumor and a lobulated feel; and Dr. Thomas feared that an arterial aneurism existed.

When I examined the boy last evening, I found on the back of the third finger a hard, fibrous-like tumor, as large as a watermelon seed, with the long diameter corresponding to the length of the phalanx. In the palm was an illy defined swelling covered with thick skin, very sensitive to pressure, and occupying about the area of a silver half dollar. No swelling was evident connecting the two tumors. On the ulnar side of the palmar mass moderately distinct pulsation could be felt, which quickly stopped when the radial artery was compressed at the wrist, but merely decreased in force when the ulnar was pressed upon with the fingers. No pulsation was felt in the dorsal tumor.

The boy had severe pain even when no pressure was made upon the growth in the palm.

I gave it as my opinion that the growth was an arterial angeioma connected with the second interosseous branch of the deep palmar arch, having anastomoses with the digital branches of the ulnar artery. Dr. Thomas considered it possibly this, but probably a sacculated aneurism. His diagnosis has proved to be the more correct.

It was determined to employ the Esmarch elastic bandage, and to make a free incision over the tumor and dissect it out, whether it be angeioma or aneurism. As Dr. Thomas was disabled by a painful boil on his right hand, he requested me to operate. The boy was etherized and the elastic bandage applied.

I made an incision from a point a little in front of the superficial palmar arch to the commissure of the fingers, and came upon a mass of fat and small vessels, in the centre of which was a bluish nodule, resembling larger vessels containing blood not driven out by the elastic bandage. Keeping close to the skin, and going down to the sheaths of the flexor tendons, I dissected the mass free. Lying alongside of the palmar interosseous muscle going to the ring finger (2d interosseous) we saw a comparatively large vessel which seemed to be the main feeder of the mass. I then extended my incision, making a straight cut along the side of the ring finger, dissected up the skin, and enucleated the hard nodule lying on the back of the first phalanx. This seemed connected with the other mass by some fibres or small vessels, and both were removed as one piece. The wound was then plugged with dry muslin, to stop the general oozing that occurred after removal of the bandage, and a tight bandage applied. No ligatures were required, because my incisions were made at a distance from the tumor.

Dissection of the palmar mass showed that I had removed a small body, about three-quarters of an inch in diameter, containing clotted blood, and surrounded by adipose tissue and nerves. Small collapsed vessels in large numbers may, perhaps, be found in this adipose tissue, by microscopic examination. Only a few larger ones were recognizable by ocular inspection, because of the absence of blood from the interior. The tumor, as is seen on the plate, consists of three lobules of rather unequal size, arranged somewhat as a trefoil. The largest one of them, which has been punctured, allows the escape of soft clot; this sac is about one-half an inch in

diameter. The three sacs seem to be separate, because the head of a pin introduced into one does not pass into the others. The two smaller sacs or lobules are hard, as if the clot was old. One has been laid open, and shows a white centre, or nucleus, of cartilaginous consistence, surrounded by a layer of red clot. On the surface of this three-lobed tumor runs a nerve, which probably was the seat of pain from pressure, and parallel to it a small artery. Both of these become lost in the mass, at the upper end of the tumor, which was thought to contain the main supply of the aneurism, and around which a string was tied and left for identification.

The tumor from the back of the finger is hard, and on section shows an irregularly colored red surface. I believe the tumors, therefore, to be small sacculated aneurisms, evidently allied to or identical with the variety called cirsoid aneurism. The one on the back of the finger and the two smaller lobules in the palm are undergoing cure by coagulation, induced in the dorsal one, undoubtedly, by the pressure from the bandage used at intervals during the last six weeks or two months.

If the diagnosis had been more certain as to aneurism, I believe that digital compression of radial and ulnar arteries, or the use of an Esmarch elsatic bandage to the forearm, would have been the proper treatment before excision was attempted.

The early period of life (about three years) at which the trouble was noticed primarily renders it probable that the aneurisms were not originally traumatic. It is possible, I suppose, that the vessels of an arterial angeioma may have become so dilated as to resemble these multiple aneurisms.

The similarity to cirsoid aneurism is certainly very great, though there are some points which differ somewhat from the usual clinical history of these growths.

After the reading of the preceding paper:

Dr. W. W. Keen called attention to the danger of using coagulating agents in such cases, and spoke of a case of traumatic origin he had seen in consultation, in which a few drops of Monsell's solution had been injected into the aneurismal sac, and gangrene had followed, necessitating amputation of the hand. He thought compression of the radial and ulnar arteries would probably have accomplished a cure, and the risks of an operation would have been avoided. With regard to the small tumor on the dorsal surface of the ring finger, he thought it unlikely to be an aneurism. Nothing short of a microscopical examination would determine its nature.

Editorial Department.

Periscope.

Chloroform Mortality.

The *Lancet*, February 11th, 1882, editorially says:—

The number of deaths at present occurring from the administration of chloroform is so startling, that it is arresting public not less than professional attention. One of these fatalities occurred at Malvern Wells, and is a fair specimen of many more. The patient, Charles Holmes, a man fifty-one years of age, consulted Mr. Haynes for dislocation of the shoulder. Mr. Haynes tried the usual modes of practice for reducing the dislocation without anæsthesia, but did not succeed, and, failing, determined to reduce under chloroform. He took every reasonable precaution before carrying out this intention. The examination of the heart gave no indication of disease, and there was no obvious reason why the narcotic should not be employed. It was also used with due care, but during the second degree of muscular excitement the patient became collapsed, and rapidly died. The post-mortem, conducted by Mr. H. J. Brown, of Worcester, revealed "long-standing structural disease," fatty degenerative change, we presume, of all the vital organs; so that "the man might have died at any moment." The class of case here presented is typical. There is a large population of this kind, a population of men and women, but of men especially, who, without presenting, even to skilled observation, their precise state, are liable to die at any moment. They die from slight mental shocks; they die from comparatively slight physical shocks; they die under efforts to run or climb; they often die in attempting to catch the train against time; they die in the most ready manner under certain of the anæsthetics. It is probable they are in danger under any of the anæsthetics which are as yet known, but it is certain that they are in great danger under every one of the class that belongs to the chlorine family. The chlorine, which really has nothing to do with the production of the anæsthesia, for that depends on the organic radical with which it is in combination, is the cause of the danger. It acts as an irritant. It produces sudden contraction of arterial fibre, arterial shock, by which the course of blood through the pulmonary and systemic circuits is impeded, and the feeble heart, unable to meet the difficulty, is arrested in its action during the second degree of anæsthetic sleep. The practical lessons to be remembered on this very solemn subject are always deserving of mention. In the first place, there can be no doubt that when any suspicion exists that life is not at its best, and that the heart is feeble, ether should take the place of chloroform. Ether relaxes, and for a case of dislocation, is singularly superior to chloroform. If the administration of ether is, for any reason, not practicable in the class of cases to which we refer, then the chloroform administration should be preceded by a full dose of some agent that has the relaxing effect of ether, and that agent we have at hand in ethylic alcohol. From one to two ounces of pure alcohol —specific gravity .830—is a valuable preliminary,

and should be given, diluted in eight ounces of water, from five to ten minutes before the inhalation of the narcotic is commenced. With these precautions, the dangers of anæsthesia may be greatly reduced; and they ought to be rigidly followed until the time comes when science shall give to us a new agent that, with all the facilities of chloroform, in respect of convenient and ready administration, shall combine the safety, with something more than safety, of anhydrous ether. In Mr. Haynes' case the coroner very properly asked Dr. Pike, of Malvern, whether, under the same circumstances, he would have used chloroform, and, receiving an affirmative reply, recalled Mr. Brown, to question him as to the propriety of a surgeon acting single handed in cases of operation. Mr. Brown answered that in country districts it was impossible for the surgeon to always provide another surgeon to administer; and this is the fact. It should, however, render more scrupulous the care with which the anæsthetic is selected.

Cirrhosis of Liver—Paracentesis—Recovery.

The following case, reported in the *Lancet* by Dr. R. A. D. Lithgow, possesses more than passing interest:—

A retired farmer, in good circumstances, aged between fifty and sixty, of full habit and lymphatic temperament, had for many years daily consumed a large quantity of alcohol, principally whisky and sherry; although not perhaps a drunkard in the usual acceptation of the term, he was nevertheless a deliberate and persistent drinker of ardent spirits in considerable quantities, from day to day. His general health had hitherto been fairly good, and with the exception of occasional "bilious attacks," there was seldom anything the matter with him.

On November 1st, 1877, previous to which the patient had been suffering from dyspepsia associated with symptoms of gastro enteric catarrh, he was seized with violent sickness, pain in the region of the liver—evidently the result of perihepatitis—and jaundice. Effervescing salines and podophyllin pills were ordered, also the local application of poultices and fomentations, and these gave him temporary relief, although the jaundice persisted, and there were physical signs of hepatic enlargement. On November 8th I called in my friend, Dr. T. J. Walker, of Peterborough, in consultation, and we concurred in regarding the case as one of incipient cirrhosis of the liver. Appropriate treatment by medicines and regimen was, as far as possible, adopted and enforced until the beginning of May, 1878; but in the meantime the chronic interstitial inflammation progressed, with accompanying symptoms of portal obstruction, and ultimately ascites with general anasarca. The patient finally became so cumbrous and helpless—the breathing becoming daily more difficult—that the question of tapping could not be much further delayed. Accordingly, as a preliminary, his legs were freely scarified on the 7th, and again on the 9th of December, 1877; and by these means his general condition was considerably relieved. The fluid, however, increased rapidly, and paracentesis abdominis was for the first time performed on December 24th, 1877. He was again tapped on January 16th, 1878, February 1st, 15th, and 27th, as much time as possible having been allowed to elapse between each operation. During the month of February he was ordered a mixture containing balsam of copaiba, and afterwards of oil of sandal, but these producing sickness, they were discontinued. Paracentesis was again performed on March 12th, 1878; also on March 25th, April 9th, April 20th, May 2d, May 16th, and, for the twelfth time, on May 30th, 1878. I am almost positive that the patient was tapped thirteen times, but as I find no note to this effect I think it best to adhere only to undoubted facts. On May 2d, 1878, the patient was ordered the following mixture, which he continued to take almost up to the time of his recovery: Half a drachm of iodide of potassium, one drachm of the tincture of digitalis, half a drachm of the tincture of capsicum, three drachms of simple syrup, to six ounces of water; one-sixth part to be taken every four hours. From the beginning of June, 1878—almost immediately after his being tapped for the twelfth (thirteenth?) time—the patient showed symptoms of gradual amendment, and on the 28th August, 1878, he was so far recovered as to be able to go to Brighton, from which he returned almost quite well, in a few weeks.

Remarks.—The symptoms were at one time complicated by an attack of concurrent subacute bronchitis, which fortunately yielded to appropriate treatment. As the patient persisted in having some stimulant, especially during his convalescence, he was ordered a pint bottle of champagne daily. During the progress of the case, the diet, for the most part, consisted of milk and beef tea, given systematically, a few teaspoonfuls of brandy being occasionally, but as seldom as possible, administered in milk. The kidneys acted well throughout, and the patient suffered little inconvenience from the tappings, which were performed as he lay upon the edge of the bed.

January, 1882. I have just heard that, the patient having resumed his intemperate habits, active mischief has once more developed itself in the liver, after the lapse of nearly three years and a half, during which he enjoyed fair health.

Congenital Cardiac Disease.

At a recent meeting of the Pathological Society of London (*Medical Times and Gazette*) Dr. Hadden related a case of congenital cardiac disease. The patient was a female child, four months old, and was under the care of Dr. Bristowe at St. Thomas' Hospital. On admission, the face was pale, the hands and lips livid, the chest expanded badly; the respiration was 66. Lung resonance in front was impaired, but breathing was vesicular. At the bases there was impaired resonance, with crepitation and rhonchi. No cardiac murmur was heard; no mention was made of heart's dullness in the notes. Improvement followed the next day. On the third day there was dullness over the left lung anteriorly, and scattered dullness at both bases, with crepitation and rhonchi. Before death the respiration was 96, and the temperature 101°. Post-mortem,

the heart weighed four ounces, the average weight at patient's age being rather less than one ounce. The septum between the ventricles was imperfect above, admitting the middle finger easily. The right ventricle was much hypertrophied, a quarter of an inch thick in some parts; the cavity was dilated at the right apex-wall, half an inch transversely. The muscular papillæ were much hypertrophied; the left ventricle was much hypertrophied; the foramen ovale and ductus arteriosus, although allowing the entry of a small probe, were practically closed. The pulmonary artery was large, the aorta inversely small. Both arose from the ventricle in the usual way. Both the lower lobes of the lungs were collapsed; the upper lobes were relaxed and crepitant; the bronchi were dilated. The nature of the case was not suspected during life, perhaps because the pulmonary trouble obscured physical signs referable to the heart. It is worthy of note that the heart weighed nearly five times the usual amount.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——"Electricity in Medicine and Surgery, with Cases to Illustrate." By John J. Caldwell, M.D., of Baltimore.

——We have received the announcement of the Woman's Medical College of Baltimore, for the session of 1882–83.

——We have received the annual report of the Central Dispensary and Emergency Hospital of the District of Columbia.

——"Genius Resistless;" a pindaric ode, in tribute to Jenner and Pasteur. By J. J. Caldwell, M.D., of Baltimore. This interesting little ode we have received, with the compliments of the author.

BOOK NOTICES.

Diseases of the Ear in Children. By Anton Von Trœltsch, M.D., Professor in the University of Würzburg. Translated by J. Orne Green, A.M., M.D., Aural Surgeon, Boston City Hospital, etc. pp. 165. New York: William Wood & Co., 1882.

The author of this volume makes the statement that "in childhood, apart from a few weeks immediately following birth, an unusually strong predisposition to diseases of the middle ear exists, owing, on the one hand, to the double influence of the peculiar morphological relations of the ear and the pharynx; and on the other hand, to the diseases and conditions of life to which the child is frequently exposed." If such be the case, it would be well for all physicians to have some knowledge of the nature and treatment of diseases of the ear. The literature on this branch is rather meagre, more so than on any other branch of medicine; therefore we welcome most cheerfully this little volume before us, and commend it highly to all.

A Practical Treatise on Diseases of the Skin. By Louis A. Duhring, M.D., Professor of Diseases of the Skin in the University of Pennsylvania, Dermatologist to the Philadelphia Hospital, etc., etc. Third edition, revised and enlarged. pp. 685. Philadelphia: J. B. Lippincott & Co. 1882.

An extended notice of this book is uncalled for. It is already well known to the profession, and wherever known, it is considered as undoubtedly and unquestionably *the* book on diseases of the skin. Dr. Duhring is everywhere recognized as an earnest and intelligent gentleman, who has devoted his time religiously to the elucidation of the nature and treatment of this most obstinate and intractable class of diseases; and this volume embodies the results of his great research. It is only necessary for us to note the issue of this third edition, thoroughly revised and fully up to date.

The Student's Manual of Histology, for the Use of Students, Practitioners and Microscopists. By Charles H. Stowell, M.D., Assistant Professor of Histology and Microscopy in the University of Michigan. pp. 290. Detroit: George S. Davis, 1882.

This is a very excellently illustrated manual, containing one hundred and ninety-two engravings. Histology is making such rapid progress that it is necessary for one to keep constantly reading and studying, else he will be found behind the age. Dr. Stowell has written a very good book; it is couched in simple, intelligible language, and is an excellent exposition of the position of histology to-day, so far as it can be expressed in so small a work.

Chronic Bronchitis—Its Forms and Treatment. By J. Milner Fothergill, M.D. Edin. pp. 160. New York: G. P. Putnam's Sons. 1882.

Dr. Fothergill is a voluminous and always an agreeable writer. This book is no exception to the rule. This author seems to possess the rare and happy faculty of writing what he wishes to teach in such a style as to make it not only valuable to the physician, but also, clear, plain, intelligible reading. So many excellent works lack this pleasantry of style, that it seems almost like an oasis in the desert when we pick up one of Dr. Fothergill's works. We can heartily commend this book, which contains much valuable advice.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	$5.00
Half-Yearly Compendium of Med. Science,	2.50
Reporter and Compendium, - - -	7.00
Physician's Daily Pocket Record, - -	1.50
Reporter and Pocket Record, - - -	6.25
Reporter, Comp. and Pocket Record, - -	8.25

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M.D.,
115 South Seventh Street,
PHILADELPHIA, PA.

THE LAST SIX MONTHS.

We again present our readers with a full index of the contents of the REPORTER for the last six months. It presents an even more varied and extensive range of subjects than usual. The activity of the medical world is unflagging, and we can justly anticipate great and beneficent results in the near future, as the fruit of this intellectual activity.

What particularly characterizes modern science is the perfection of its method. The laws of phenomena are sufficiently understood to act as secure grounds for the investigator of the still hidden secrets of nature and man. Those who persist in blinding themselves to these laws, and deny those methods, will undoubtedly find themselves attacking an invincible opponent. It behooves those who see more clearly, or who are more honest to their perceptions, to repudiate and shun such pseudo-scientists.

The productions of the medical press have been regularly brought to the notice of our readers. They have, perhaps, not contained so many new productions of conspicuous merit as in some previous semesters; but the supply shows that the demand in the profession is greatest for the best class of works, especially for treatises on special subjects by those thoroughly conversant with them.

The proceedings of the Societies have been reported at considerable length. They indicate, better than any other kind of reading, what are the living, moving ideas of the day, and deserve attentive perusal.

On the whole, we believe we can say that a review of the numbers for the six months will convince any one that the art of medicine shares in full the progressive spirit which characterizes the most of the aims of human intelligence in the present day.

THE AGE OF BACILLI.

The history of the Science of Medicine teaches in no uncertain terms the fact that, from the beginning of the world of medicine, our profession has been at different times dominated and influenced by certain theories, all of which have seemed at the time to possess sufficient reality to cause them to influence and direct the whole tendency of medical research and clinical treatment into channels in accord with their teachings. The humoral theory of disease, at one time accepted by the greatest medical teachers as the source of all our ills, is only one out of many illustrations that could be adduced to substantiate this proposition.

All the various theories that have been presented from time immemorial, have had for their basis the fundamental idea of the presence in the body of some foreign element or elements, of some pathological constituent of the human body, which, being abnormal and inimical to healthy life, was the direct cause of disordered or morbid manifestations, thereby producing a diseased condition of the organism.

In this general age of progress, our profession is not behind the times. We have now our "*new departure;*" we are now dominated by a new idea concerning the causative agency of disease, and one that seems to possess more rational grounds for acceptance than any that have gone before.

Commencing really with the experiments and experience of JENNER, this idea of *bacilli* has been gradually engrafting itself upon the minds of medical investigators, until to-day we have it claimed that several of the most serious and most prevalent diseases known to men are produced by the presence of bacilli in the body.

From Italy we have the *bacillus malariæ*, of TOMMASI CRUDELLI; from Germany the *bacillus typhosus*, of KLEBS; from America the *bacillus* of diphtheria, of WOOD & FORMAD; from France the *bacillus anthracis*, of PASTEUR, and lastly, from Berlin the *bacillus tuberculosis*, of KOCH.

This word *bacillus*, new and unintelligible to many of our readers, really means, in all instances, a minute animal or vegetable parasite, which, entering the body and possessing the power of growth and reproduction therein, gives rise to the various forms of disease, according to the nature of the bacillus introduced.

The experimental research in these different cases, carefully conducted by experienced investigators, and covering a long period of time, would seem to establish as definitely as our present means of research will allow us to determine, that the presence of these parasites is really the essential cause of the disease in question.

We have had occasion, during the past few months, to note, in the columns of this journal, the occurrence of what would seem to be pneumonia from contagion.

Would it be too much of a stretch of the imagination to suppose that this disease, and, indeed, that all other diseased conditions of organic life, may be due to the presence of parasites.

It would certainly seem very plausible for us to hold this theory, in the light of modern research; and reasoning from such a basis, a broad field is opened up for the use of young, active men, who are ambitious to distinguish themselves as original investigators.

But the real, true, vital question has not yet been met, and it is in this direction that future investigation should be especially directed.

PASTEUR has succeeded in discovering a method of artificial cultivation of his bacilli, by which he can so reduce their virulence that they will be deprived of their extremely dangerous power to cause fatal disease, yet will retain sufficient of their original force to so impress the systems of the lower animals as to confer upon them immunity from the disease in its more serious and fatal form; in reality, he vaccinates them as a preventive of anthrax or splenic fever, just as the human being is vaccinated as a preventive against smallpox.

KOCH has succeeded in developing his bacilli outside of the body, artificially, for a period of six months, and then has produced tuberculosis in the bodies of animals inoculated with these artificially developed parasites.

But the practical point that we now desire, and toward which these discoveries direct our attention, is some remedy capable of destroying the vitality, and therefore the power for mischief, of these little foreign rascals. If one set of investigators will devote their time to elucidating the nature of the bacilli or parasite of any particular disease, and then themselves or others following in their footsteps will investigate and experiment until some means has been devised by which the foreign body in each particular case may be destroyed, then will we have accomplished a great practical feat in therapeutics. It is very well to discover a process by which immunity from any disease may be conferred, but until the public more fully realize the value of prophylaxis (which, thank God, they are commencing to do) it is equally or even more important to know how to stay the ravages of disease when it has become once established, and in the case of these parasitic diseases, it would seem that the most rational way to accomplish this indication would be to have and possess some measures potent to destroy the cause.

Let us trust that investigators will direct their energies in this direction, and that ere long we will have some good therapeutical results from this "*age* of bacilli." We have now a good pathological foundation upon which to erect our superstructure of therapeutics in these diseases due to bacilli; let us avail ourselves of the opportunity, and the nineteenth century will truly be *the* age of medical progress.

Notes and Comments.

Ovariotomy in a Young Girl.

In the *Medical Bulletin* Dr. W. A. Fergusson reports the following unusual case: The girl was a native of England, aged 15 years. After having complained, during her twelfth year, of acute pain in the left iliac region, it was noticed the abdomen was enlarging. This gradually increased, pushing the viscera out of position and causing her to present a truly pitiable appearance. She refused to have the tumor removed, and in order to relieve her sufferings, was tapped four times. The cyst rapidly refilled after each tapping. She became very weak and emaciated, and consented to have the tumor removed. The cyst was extensively adherent to the liver, stomach, walls of abdomen, and to a less extent to the intestines, which prolonged the operation. The tumor with its contents weighed fifty-nine and two-fifths pounds. The girl made a rapid and complete recovery.

Digestion of Cellulose.

The *Lancet* says that M. Duclaux, continuing his investigations into the digestive process, has satisfied himself that the diastase of the stomach and pancreas is without any influence on cellulose, and it may, therefore, reasonably be asked whether cellulose deserves to be ranked among alimentary substances. Experiments on the herbivora present many difficulties, but are more practicable with the gramnivorous birds; and by feeding pigeons with Saracen wheat, malt, and pearl barley he has satisfied himself that the excrements do not contain the whole of the cellulose ingested, the amount absorbed being about one-fifth of the whole. But what is the agent of this digestion? In examining the entire grains found in the crop of birds or the paunch of the ruminants, some are found with the contents entirely liquefied. The microscope shows that in these the amylaceous masses are intact, preserving the form of the cellules which they fill, but free from their envelope, and swimming in a liquid which contains thousands of minute rods, analogous to those which have been described by Van Tieghem, as the ferments of cellulose—"amylobacteria." These minute rods, by their growth, may be the means of effecting the digestion of cellulose, transforming it into dextrine and into glucose. These are found in the liquids of the gizzard, the mucous membrane of which, although a powerful absorbent, secretes no substance capable of acting on starch. It is easy to understand the important part played by this process of liquefaction of the interior of the grain on the rumination of the herbivora, and on the action of the gizzard in birds. It is certain that, once present, this influence goes on, not in the stomach, in which the acid liquid hinders their effect, but in the whole length of the intestine of the herbivora. These organisms are thus, probably, the only agents in the physiological digestion of cellulose. Truly, our range of vision regarding the action of bacteria is becoming widely extended. They appear not only to constitute the processes of disease, but even to subserve some of the functions of health.

Correspondence.

Can Two Special Systemic, or Local Activities Co-Exist?

Ed. Med. and Surg. Reporter:—

On the 23d of December, 1881, I vaccinated a boy 13 years of age. The operation was a secondary one, but it proved fairly successful. Three days after the performance of the operation a brother of the boy was found to be suffering from diphtheria, from which disease he unfortunately died six days later. Two other brothers and the father of the children subsequently became affected. The vaccinated boy and the mother of the family were the only ones that escaped, except a little girl who was early taken away from home. The mother was between four and five months gone in pregnancy. Neither of these had the disease previously.

Now, would there not seem to be some reason for believing that the vaccination in the boy's case and the pregnancy in the mother's prevented them respectively from being attacked with diphtheria?

It has long been more or less believed by many that one special activity in the system, or a part thereof, serves to prevent the occurrence of another, or others. The celebrated Dr. John Hunter was, perhaps, the first to speak explicitly and authoritatively on this interesting and important subject. In his "Treatise on the Blood, Inflammation and Gunshot Wounds," published in 1793, he says: "It appears to me, beyond a doubt, that no two actions can take place in the same constitution, nor in the same part, at one and the same time; the operations of the body are similar in this respect to actions or motions in common matter. It naturally results from that, that no two different fevers can exist in the same constitution, nor two local diseases in the same part, at the same time." These views have been combated, but I believe their correctness has not at all been entirely disproved.

In his work on the practice of medicine, Dr. Aitken ventures to affirm that "the doctrine of the incompatibility of two or more contagious diseases occurring in the same subject has been clearly proved to be erroneous. Dr. Murchison, in an admirable paper on this subject, in *The British and Foreign Medico-Chirurgical Review* for July, 1859, has clearly shown the co-existence

of variola and scarlatina; also of variola and rubeola."

Dr. G. B. Wood disposes of the matter in his work on the practice of medicine as follows: "There seems to be a certain incompatibility between the several contagious febrile complaints; so that if an individual has been exposed to the causes of two of them he will not usually be affected simultaneously with both, but one will run its course, and when it begins to decline the other will appear, or the feebler one, if it have precedence, will be superseded for a time by the more powerful, and will return and finish its course after the latter has subsided. Such is the case with measles and smallpox. Occasionally, however, we see two of these complaints apparently existing together and modifying each other, as in the cases of measles and scarlet fever."

In his "Medical Notes and Reflections," Sir Henry Holland, one of the most philosophic of modern physicians, gives the following opinion on the subject: "Though we have many instances of such seeming incongruity of two diseases, that one present in the system precludes the ingress of the other, still, there is no foundation for a general law to this effect. On the contrary, we have various proof that morbid actions derived from sources wholly different may coexist in the body, severally modifying each other, though under conditions scarcely surmised in our present knowledge.

That the effects of medicines on the system, or parts of it, will take the place of diseases, is the cardinal principle of homœopathy. Sulphur kept about the person (at the suggestion of the late Dr. Hering), in such a way as that some of it will be absorbed, has been extensively practiced, to prevent cholera. Belladonna is used by many homœopaths and others to prevent scarlet fever, and tobacco has long been used by not a few to prevent various acute general diseases. The use of counter-irritants is based on essentially the same principle.

The literature of this subject is meagre. It deserves more attention than it has yet received. More facts bearing on it are wanted. And here I may remark that the point of chief interest and value is not whether one special activity invariably prevents another, but whether it does so generally, or even in a fair proportion of cases.

THOS. S. SOZINSKEY, M.D.

Philadelphia, May 15, 1882.

Heredity.

ED. MED. AND SURG. REPORTER:—

During the discussion of Robert Koch's paper on the "Etiology of Tuberculosis," before the Congress of Medicine, in Wiesbaden, April 22d, which elicited the approval of all pathologists present, the question of heredity was brought forward, and answered by Koch in the following manner:—

It is a known fact, that the quality of the substratum has the greatest influence upon the proliferation of micro-organisms. The human body also does not always offer a uniformly good substratum to pathogenous micro organisms. Thus one individual is more easily attacked by them than another, on account of a difference in disposition toward infection. This disposition is hereditary; and hereditary tuberculosis is not a transmission of the bacilli of this disease, but the transmission of conditions which are favorable to their growth.

[Bazinsky, during the discussion, pointed out the readiness with which general tuberculosis is developed during childhood, in preference to phthisis, depending upon the great blood pressure in the lungs in comparison with that of the general circulation. Cause: conditions of muscular wall of right heart.]

Boston, Mass. F. W. VOGEL, M.D.

Feeding Invalids.

ED. MED. AND SURG. REPORTER:—

Believing, as I do, that we are too often guilty of prescribing and forcing upon our patients a certain kind of *diet*, though repulsive, regardless of the natural demand made known by the incessant and persistent craving of the system for certain articles which are forbidden them, you will confer a favor by inserting in your valuable journal the following inquiry, the result of which will be embraced in the consideration of the subject and made known in due time, viz.,

What is your experience in allowing your patients to eat whatever they crave or desire during their sickness?

1st. Do you generally direct what they should eat?

2d. Relate such cases in which your directions were not obeyed.

3d. Was the effect injurious?

4th. Was the effect beneficial?

5th. Was there any noticeable effect?

6th. State nature of disease and kind of diet taken.

The physicians throughout the country will confer a favor by sending us any information upon the subject, and to those so doing we will furnish a copy of the results of such investigation. All communications strictly confidential when so desired, and should be sent to

Delphos, O. W. H. NUDING, M.D.

News and Miscellany.

Kansas State Medical Association.

The Kansas State Medical Association, in session at Emporia, Kansas, May 9th and 10th, elected the following officers for the ensuing year: Dr. G. W. Haldeman, of Paola, President; Dr. Menderhall, of Newton, Vice-President; Dr. T. D. Morse, of Lawrence, Secretary; Dr. W. W. Cochran, of Atchison, Treasurer. The next meeting will be held at Topeka, commencing on the third Tuesday in May, 1883.

Darwin Memorial Fund.

A Committee has been formed in London, consisting of the leaders in zoölogy and kindred sciences, for the purpose of promoting the establishment of a Darwin Memorial Fund, to be devoted to the furtherance of biological research.

Closure of Schools Affected with Infectious Diseases.

At a recent meeting of the London Society of Medical Officers of Health, the following resolution was adopted:—

"*Resolved*, That this meeting, feeling that some dangerous infectious diseases are disseminated through the agency of public elementary schools, approves of the action of the Educational Department in investing sanitary authorities with the power of requiring the closure of such institutions, with the view to preventing the spread of such diseases."

Cinchona Cultivation in Ceylon.

The rumor that cinchona planting in Ceylon was likely to die out, on account of the unsuitableness of the climate, has been denied. The variety *officinalis*, which formed the bulk of the first planting, is the only variety unsuited to the climate. *Succirubra* and *ledgeriana* are flourishing well, the former plants, about four years old. selling freely, in any quantity offered, at $2.50 each.

Massachusetts State Medical Society.

At the recent meeting of the Massachusetts State Medical Society, it was decided, after much discussion, not to admit women to membership. The following officers were elected for the ensuing year: President, Dr. Alfred Hosmer, of Watertown; Vice President, Dr. John H. McKey, of New Bedford; Treasurer, Dr. Frank W. Draper, of Boston; Corresponding Secretary, Dr. Charles W. Swan, of Boston; Recording Secretary, Francis W. Goss, of Roxbury; Librarian, P. H. Hayden, of Boston.

Philanthropic Inconsistency.

Under the head of cruelty to animals, an exchange prints the recent bequests in a Philadelphia will, leaving $1000 to the Society for the Prevention of Cruelty to Animals, and $15,000 to the Managers of a Women's Hospital, on condition that they forever keep out all unfortunate girls from the obstetrical wards.

Items.

—Mr. Ray Lankester has been re-appointed Professor of Zoölogy and Comparative Anatomy at University College, London.

—Dr. Courbin, of Bordeaux, has detected small worms in the alveoli of a dog's lung, by microscopical examination. Some were free, some were encysted. The post-mortem established pneumonia as the cause of death.

—A very simple dropper may be made by bending a piece of glass tube at a right angle, and drawing one end out to a point. On inserting the other end into the bottle, and gently inclining the latter, some of the liquid will ascend along the tube, even before the liquid in the bottle has reached the mouth, and may be dropped at will.

OBITUARY NOTICES.

—Dr. John W. Corson, of East Orange, died on Friday, June 9th; 1882, in the 66th year of his age. Dr. Corson was a practicing physician in Brooklyn for many years, removing from there to Toronto, Canada, on account of ill health. After a few years' residence in Canada, having regained his health, he removed to East Orange, where he has resided for the past fifteen years. He was a frequent contributor to the leading medical journals, and was the author of several books published by the Harpers, of New York.

—Dr. J. J. Jennings died at his residence, No. 16 East Front street, Trenton, N. J., June 1st,1882, from blood poisoning, the result of vaccination. It appears that Dr. Jennings vaccinated himself with bovine matter, using his pocket knife as a lancet, and soon afterwards his arm became very much swollen, and death finally resulted, as above stated. Dr. R. R. Rogers was called, and found that the inflammatory stage had passed, and that mortification had set in. The deceased had had a heavy chill and was in a high fever. The bovine matter used was the same as had been successfully used in many other cases, which leads the physicians to believe that either the system of the deceased was in an unhealthy condition at the time of the vaccination, or else there was some impure substance upon the knife blade which was used for a laneet. A well-known physician remarks that probably ten thousand persons have been vaccinated during the past two months in Trenton, and that Dr. Jennings was the only fatal case resulting therefrom, while there were many deaths the result of neglecting to be vaccinated.

MARRIAGES.

BULL—KINGSBURY.—On Saturday morning, June 10th, at St. John's Church, Waterbury, Ct., by the Bishop of the diocese, assisted by the Rev. F. T. Russell and the Rev. R. R. Converse, rector of the Church, Dr. Charles Stedman Bull, of New York, and Mary, daughter of Frederick J. Kingsbury.

CHASE—GRAVES.—In Woodstock, Vt., May 16th, by Rev. S. A. Parker, Dr. M. R. Chase, of Ludlow, and Eva H. Graves, of Weston.

HIER—SMITH.—On Tuesday evening, June 6th, 1882, at the residence of the bride's mother, 639 N. Twelfth street, Philadelphia, by Rev. Jacob Todd, D.D., Dr. W. G. Hier, of Cincinnati, and Olley, daughter of Mrs. Ellen and the late Dr. Charles P. Smith.

HOAG—WARNER.—In New York city, on June 1st, 1882, by Dr. Howard Crosby, Pierre C. Hoag, M.D., and Laura, daughter of J. W. Warner, M.D.

JORDAN—GODARD.—At Beaver, Pa., March 29th, 1882, by Rev. G. W. Shaiffer, David C. Jordan, M.D., and Miss Laura E. Godard, both of New Brighton, Pa.

JULIEN—NEVINS.—At Roselle, N. J., on Thursday, June 1st, by the Rev. Matthew Julien, Dr. Alexis A. Julien and Annie Walker, daughter of Peter I. Nevins.

DEATHS.

GRAY.—In New York city, on Monday, June 5th, Dr. John F. Gray, in the 78th year of his age.

JENNINGS.—In Trenton, N. J., on the 1st of June, James L. Jennings, M.D., in the 67th year of his age.

SERIAL

P
Med
M
v.46

GERSTS

Medical and surgical reporter
(Philadelphia)